

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

CARIBBEAN ENVIRONMENTAL PROTECTION DIVISION
CITY VIEW PLAZA, SUITE 7000
#48 165 RD. KM 1.2
GUAYNABO, PR 00968-8069

AUG 3 1 2012

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Article Number: 7011 0470 0000 5040 0829

Mrs. Irma López, Acting Director Compliance and Quality Control Puerto Rico Aqueduct and Sewer Authority P.O. Box 7066 San Juan PR 00916-9990 Honorable Jorge A. Santini-Padilla, Mayor Municipality of San Juan P.O. Box 9024100 San Juan, Puerto Rico 00902-4100

Re: Reconnaissance Inspection, April 23 and 25, 2012

Portions of the Quebrada San Antón, Quebrada Juan Méndez, Río Piedras River, Puerto Nuevo Canal, Quebrada Doña, Ana watersheds

Canal, Quebrada Doña Ana watersheds Municipality of San Juan ("MSJ") Municipal Separate Storm Sewer System ("MS4") Permit

(PRR040036)

PRASA Puerto Nuevo Wastewater Treatment Plant Collection System (PR0021555)

Puerto Rico Department of Transportation and Public Works (DTOP) MS4 Permit PRR040080

Dear Mrs. López and Mayor Santini.

This letter is in reference to the National Pollutant Discharge Elimination System ("NPDES") Reconnaissance Inspection ("RI") conducted by the United States Environmental Protection Agency's ("EPA") Region 2, Water Compliance Branch and Caribbean Environmental Protection Division on April 23 and 25, 2012. This report indicates that certain potential non-compliance items and/or areas of concern which must be corrected and/or investigated to ensure compliance with your respective NPDES Permits.

Within forty five (45) days of receipt of this letter, respond to EPA-CEPD in writing with the actions that MSJ, PRASA, and DTOP has taken or will take to address the non-compliance items and areas of concern identified in the report. MSJ, PRASA and/or DTOP must add these items to its Action Registry, and work to correct these items in an expeditious manner. However, if these items require extensive repairs and/or capital investments, than the work shall be scheduled in consideration of other priorities and the schedule included on the Action Registry.

Also, send a copy of your response to Doughlas McKenna, Chief Water Compliance Branch, EPA Region 2, 290 Broadway, NY, NY 10007 and to Wanda E. García Hernández, Director, Water Quality Area, EOB, Puerto Rico Environmental Quality Board, P.O. Box 11488, Santurce, Puerto Rico 00910.

If you have any questions please feel free to contact me at 787-977-5840.

Sincerely,

Jaime Géliga

Chief

Municipal Water Programs Branch

Enclosure

cc: Wanda E. García Hernández, Director, Water Quality Area, PREQB

Eng. Maria Matos, Municipality of San Juan, Environmental Affairs Program

Eng. Hans Figueroa, Consultant for the PRDNER

Eng. Carmen G. Alicia PRDTOP

bce: Barbara McGarry, USEPA - CAPS

M. Lantner, DECA-WCB w/enclosure

Eduardo J. Gonzalez, EPA-ORC electronically via email

Kim Kramer, EPA-ORC electronically via email Diane Gomes, EPA-ORC electronically via email Susan Bruce, EPA-HQ electronically via email Alan Morrissey, EPA-HQ electronically via email

Ellie Codding, ERG, electronically via email

Keith Tashima, USDOJ, ENRD-EES electronically via email Patricia McKenna USDOJ, ENRD-EES electronically via email Rachel K. Evans, USDOJ, ENRD-EES electronically via email

EPA

United States Environmental Protection Agency Washington, D.C. 20460 Water Compliance Inspection Report Form Approved.

OMB No. 2040-0057 Approval expires 8-31-98

	Арргочаг	expires 8-31-98	
Section A: Natio	onal Data System Coding (i.e., PCS)	
Transaction Code 1 N 2 3 P R R 0 4 0 0 3 6 11	vr mo day 12 1 2 0 4 2 3 17	Inspection TypeInspectorFac Type 18-19	R 201
21	Remarks	66	5
Inspection Work Days Facility Self-Monitoring Evaluation Rating	B1 QA	Reser	ved
67 2 69 70 U	71 72	7374*	7580
Se	ection B: Facility Data		
Name and Location of Facility Inspected (for industrial users discharging to POTW) name and NPDES permit number		Entry Time Date Permit Effective D	ate
Municipality of San Juan MS4 (Quebrada San Antón,		April 23, 2012	
Méndez, Río Piedras River, Puerto Nuevo Canal, Quel	brada Doña Ana) 📗	Exit Time Date Permit Expiration D.	ale
P.O. Box 9024100			
San Juan, Puerto Rico 00902-4100		April 25, 2012	11/30/10
Name(s) of On-Site Representative(s) Title(s)/Phone and Fax Number(s)		Other Facility Data	11/30/10
		- Ciner ruesiny issue	
Not Contacted - San Juan MS4 Eng. Maria Matos:		Jose F. Ortiz Velazque	ez, Executive
MMATOS01@SanJuanCapital.com		President, Puerto Rico	Aqueduct and Sewer
Executive Director Tel. No. (787) 480-2253		Authority (PRASA) Pr	uerto Nuevo Regional
Environmental Affairs Program Name, Address of Responsible Official/Title/Phone and Fax Number(s)		WWTP, P.O. Box 706	6. Barrio Obrero
Name, Address of Responsible Official/fille/Phone and Fax Numbers		Station, Santurce, Puer	
Honorable Jorge Santini, Mayor		NPDES Permit No. PF	
Autonomous Municipality of San Juan			1002.000
P.O. Box 9024100	Contacted		
San Juan, Puerto Rico 00902-4100	Yes x No		
our starry i troite street	A I I I	-	
Section C: Areas Evaluated Di	uring Inspection (Check or	nly those areas evaluated)	
Permit Flow Measurement	Operations &	Maintenance CSO/SSO (Sewer Ov	erflow)
Colf Manuscripe Decurem	Studen Hand	ling/Disposal Pollution Prevention	
Records/Reports Sclf-Monitoring Program	Sladge Hand	ing/thisposal rottudon revendon	
X Facility Site Review Compliance Schedules	Pretreatment	Multimedia	
X Effluent/Receiving Water Laboratory	x Storm Water		
Section D: Summary of Findings/Comments	(Attach additional sheets o	f narrative and checklists as necess	ary)
Roberto Martínez – PRASA Metro Region, San	Juan Operations S	Supervisor – 787-406-64	13
See Enclosed Report			
Not Contacted - PRDTOP Contact Eng. Carmen	n G. Alicea (787) 7	21-8787.	
Mailing Address			
PR Dept. of Transportation and Public Works, F	O Box 41269 Sa	n Juan PR 00940-1269	
SEV Code A0020 WW SSO - Discharge to Wa			
	Agency/Office/Phone and Fax		¥ 116/12
	-	2) 637-3976/ FAX: 637-4211	8/30/12
Alex Rivera, Env. Eng. CEPD	EPA-CEPD - 787-977-58	40	-/3-//-
Jaime Géliga, Chief, CEPD-MWPB	Agency Office/Phone and Fax EPA Region 2, CEPD 787-977-5840 (ph)		

INSTRUCTIONS

Section A: National Data System Coding d.c., PCS)

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be new unless there is an error in the data entered

Columna 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U-unpermitted, G-general permit, etc... (Use the Remarks columns to record the State permit number, if necessary)

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01,

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A	Performance Audit	U	IU inspection with Pretreatment Audit	ŧ	Pretreatment Compliance (Oversight)
В	Compliance Biomonitoring	X	Toxics Inspedion	@	Follow-up (enforcement)
С	Compliance Evaluation (non-sampling)	Z	Studge - Biosolids	œ.	onow-up (on or our only
D	Diagnostic	#	Combined Sewer Overflow-Sampling	f	Storm Waler-Construction-Sampling
F	Pretreatment (Foliow-up)	\$	Combined Sewer Overflow-Non-Sampling	,	
G	Fretreatment (Audit)	+	Sanitary Sewer Overflow-Sampling	}	Storm Water-Construction-Non-Sampling
1	industrial User (IU) Inspection	8	Sanitary Sewer Overflow-Non-Sampling		Storm Water-Non-Construction-Sampling
j	Complaints	J.	CAFC-Sampling		Cloth Wald-Holl College College
М	Multimedia	2	GAFO-Non-Sampling	-	Storm Water-Non-Construction-
N	Spili	2	IU Sampling Inspection		Non-Sampling
0	Compliance Evaluation (Oversight)	3	tU Non-Sampling Inspection	<	Storm Water-MS4-Sampling
P	Pretreatment Compliance Inspection	4	IU Toxics Inspection	-	Storm Water-MS4-Non-Sampling
R	Reconnaissance	5	I∪ Sampling inspection with Pretreatment	>	Storm Water-MS4-Audit
S	Compliance Sampling	6	Non-Sampling inspection with Pretreatment		
	a composition of a composition	7	IU Toxics with Prefreatment		

Column 19: Inspector Code. Use one of the codes listed below to describe the feed agency in the inspection.

B E J	State (Contractor) EPA (Contractor) Corps of Engineers Joint EPA/State Inspectors—EPA Lead Local Health Department (State)	O— Other Inspectors, Federal/EPA (Specify in Remarks columns) P— Other Inspectors, State (Specify in Remarks columns) R— EPA Regional Inspector S— State Inspector T— Joint State/EPA inspectors—State lead
	NEIC Inspectors	

Column 20: Facility Type. Use one of the codes below to describe the facility.

- 1 Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
- 2 Industrial Other than municipal, agricultural, and Federal facilities.
- 3 Agricultural Facilities classified with 1987 SIC 0111 to 0971
- 4 Federal Facilities identified as Federal by the EPA Regional Office
- 5 Oil & Gas Facilities classified with 1987 SIC 1311 to 1389

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors, any effort for laboratory analyses, testing, and remote sensing and the billied payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter

Columns 73-80: These columns are reserved for regionally defined information

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIG/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 2, DECA-WCB 20th Floor, 290 Broadway, NY, NY 10007

AND

USEPA Region 2, CEPD-MWPB CITY VIEW PLAZA II – SUITE 7000 #48 RD. 165 km 1.2 GUAYNABO, PR 00968-8069

Compliance Evaluation Inspection:

Municipality of San Juan Municipal Separate Storm Sewer System

("MS4") Permit (PRR040036)

PRASA Puerto Nuevo Wastewater Treatment Plant Collection System

(PR0021555)

Puerto Rico Department of Transportation and Public Works

(PRR040080).

Inspection Date:

April 23 and 25, 2012

Inspectors: Murray Lantner, P.E. Env. Eng. USEPA Region 2, DECA-WCB, (212) 637-3976

Alex Rivera, Env. Eng. EPA Region 2 CEPD-MWPB (787) 977-5845

A. Introduction

On April 23 and 25, 2012 Murray Lantner and Alex Rivera of EPA Region 2 conducted a Reconnaissance Inspection of storm sewers and manholes in the Quebrada San Antón, Quebrada Doña Ana, Río Piedras River, and Canal Puerto Nuevo watersheds. The majority of the points inspected were identified by the Municipality of San Juan's contractor, CSA, in 2009 as part of a flood control study. EPA revisited the points identified below to ascertain their current status and whether dry weather discharges were still occurring.

EPA conducted field screening of grab samples using Hach Ammonia Test Strips Cat. 27553-25 (range from 0-6 mg/l) and pH paper range 4.5 to 10.5 S.U. Note that these are not 40 CFR Part 136 approved methods, but are useful for field screening of outfalls. Ammonia has been used as a screening tool by some MS4s with severe or widespread sewage contamination. An ammonia concentration over 1 mg/l is generally considered to be a positive indicator for sewage contamination. Although some limitations have been identified, such as not detecting diluted sewage or elevated ammonia due to non-target

sources such as irrigation, it does serve as a valuable screening tool (Section 12, P. 132 and 133 of the 2004 IDDE Manual http://cfpub1.epa.gov/npdes/stormwater/idde.cfm). The grab samples were taken using a rope attached to a plastic container to collect the discharge directly from the outfall pipes, without also collecting any receiving water in the sample.

Below is a summary of our findings from the inspection. There was a brief rainfall during the inspection period on April 23, 2012 when the inspectors were at Quebrada San Antón at or about Calle Garcilaso de la Vega and Consuelo Matos, but prior to arriving at Calle Nicolas Aguayo. There was a trace rainfall recorded at the LMMIA rain gauge on April 23, 2012. On April 25, 2012 there was a short, but intense rain storm, when the inspectors were at Ave. Roosevelt (PR-23) and the Canal Puerto Nuevo after the inspectors had recorded dry weather flows from pipes to the southwest and northeast of this location. On April 25, 2012 there was a 0.35" rainfall recorded at the San Juan Luis Muñoz Marín International Airport (Rainfall data for April 2012 included in Attachment 7)

B. QUEBRADA SAN ANTON - POTENTIAL NON-COMPLIANCE OR AREAS OF CONCERN

Calle Belén Zequeira and Quebrada San Antón (West Side of Quebrada) – Sabana Llana Country Club

There was a double barrel round sewer that had a dry weather flow at this location. The outfall on the west side of the Quebrada was covered with vegetation and there was a sewage odor. (Photos DSCN0006 ("6"), 7, and 8 contain photos of this area.) Note that some maps depict this area as part of Carolina (even though it is on the west side of the Quebrada) and others depict this area as part of San Juan. Regardless of the outfall location, it is possible that the collection system for this outfall extends into San Juan. The 2009 CSA Report for this location (see Attachment 2a) shows 2 outfalls at this location, Q15d-S005a and S006a. The CSA report for outfall S006a indicates there that MSJ should verify whether there is a possible connection with the sanitary system at this location.

2. Calle Hernández and Calle Carlos De La Torre (Just north of School)

As shown in photographs 9 and 10 (Attachment 1) there was a trickle of dry weather flow discharging into the west side of Quebrada San Antón from the outfall. This discharge was identified in the 2009 CSA Report (see Attachments 2b.2 - 2b.4) as R15c-S001a indicates that MSJ should verify whether there is a possible connection with the sanitary system at this location. Maps of the area indicate that this outfall is within the Municipality of San Juan.

3. Calle Ledru and Calle De La Torre

- a. As shown in photograph 11 and 12 (Attachment 1) there was a manhole that was missing a manhole cover. Pallets of wood were placed in and on the manhole, but the missing cover poses a safety risk that should be replaced.
- b. As described in the 2009 CSA Report (see attachments 2b-4 and 2b-5) which indicates that MSJ should verify whether there is a possible connection with the sanitary system at this location, outfall R15c-S003a, at or about Calle Ledru and Calle De La Torre.

4. Calle De La Torre - Q15d-S004a

While the exact location of this Quebrada Antón discharge was not identified on the CSA Maps, CSA in 2009, as shown in attachment 2b-6 and 7, indicated that MSJ should verify whether there is a possible connection with the sanitary system at this location.

5. Calle Antonio Luciano and Calle Garcilaso De La Vega

As shown in photograph 20 there was a small dry weather discharge from this outfall at this location into Quebrada San Antón. Some algal growth was seen at this location. The CSA report in Attachment 2c-2 and 2c-3 recommended that the stormsewer system should be checked for possible sanitary connections.

6. Garcilaso de la Vega and Consuelo Matos

As described in the CSA report attachments 2c-4 and 2c-5 CSA recommended that the stormsewer system should be checked for possible sanitary connections at this location. EPA did not list any findings from this location during this inspection, but MSJ should also inspect this outfall when it follows up on the other Quebrada San Antón discharges.

7. <u>1232 Nicolas Aguayo (just west of Garcilaso de la Vega), San Juan – Sewage overflow on street.</u>

As shown in photographs 26 to 33 and 38 to 41 there was sanitary sewage flowing onto the sidewalk near 1232 Nicolas Aguayo (Approx. Location shown on Map 2d-

2). There was a sewage odor as well as algal growth in the puddles and vegetation growth in the street located in the flow path. A resident indicated that there had been sewer backups into the house. There was a disconnected house lateral that was flowing onto the sidewalk (see photo 38). The sanitary wastewater and storm water from this location flows across Calle Nicolas Aguayo and was seen entering the Quebrada San Antón. There appeared to be a blockage in the sanitary sewer line since the manhole located just west of 1232 at 1228 and 1229 Nicolas Aguayo was not flowing and appeared obstructed. Another manhole located to the east of the

house (see photo 36 was flowing). PRASA/MSJ, if not already fixed, must eliminate the sewage discharge to the sidewalk and to Quebrada San Antón from this location. The sewer line must be maintained to ensure flow in the sewer.

8. <u>Discharge from sewer into the west side of Quebrada San Antón behind (to the east of 1232 Calle Nicolas Aguayo).</u>

As shown in photographs 42, 44 and 45 there was a discharge from a sewer pipe located behind/east of 1232 Nicolas Aguayo into the west side of the Quebrada San Antón. There was a significant flow from the outfall and some slight foaming at the discharge. Ammonia screening samples taken by EPA recorded ammonia levels between 0.5 and 1.0 mg/l and a pH of about 6. (Image 43 is a video of this discharge as well). Screening for illicit connections and determining the source of the flow is necessary.

9. Bridge over Quebrada San Antón at Calle Nicolas Aguayo/Calle Lorena
There was a leak (trickle) from a sanitary sewer line that crosses the Quebrada San
Antón along the bridge at Calle Nicolas Aguayo (San Juan)/Calle Lorena (Carolina),
a screening sample taken of this trickle had ammonia levels of 6 mg/l. The leaking
sanitary sewer line must be repaired.

C. QUEBRADA JUAN MÉNDEZ - POTENTIAL NON COMPLIANCE ITEMS/AREAS OF CONCERN (April 23, 2012)

1. Calle José De Diego (PR-47) – Quebrada Juan Méndez

There was a strong flow from the outfall located on the west side of the Quebrada Juan Méndez, located west of Calle Lealtad. This discharge was also identified during EPA's February 2012 inspection. See photograph 50. PRASA indicated in its June 14, 2012 letter to EPA in response to the February 2012 inspection that "no visible discharge to the creek/channel was observed at this location. No sewage contribution from PRASA system to stormwater system was observed.

2. Calle Lealtad and Calle José De Diego

EPA verified that the sanitary sewer overflow that was seen at this location in February 2012 had ceased. However, the catch basin at this location needed to be cleaned (see photographs 52 and 53).

3. Calle Ariel – Quebrada Juan Méndez

a. As shown in photographs 54 and 55 there were several signs that a sanitary sewer overflow occurred at this location. There was debris, such as rags, paper, and other material at the rim of the manhole and debris on top of the

concrete block around the manhole. The manhole cover was not seated properly and was partially off the manhole rim. Sanitary Sewer Overflows at this location would flow into the Quebrada Juan Méndez just a few feet away. As shown in photographs 59 and 60 there was a buildup of material inside the sanitary sewer at this location.

b. As shown in photographs 63 and 64 (and video 66) there was a dry weather discharge into the Quebrada Juan Méndez via an outfall on the east side of the Quebrada, south of Calle Ariel and north of Calle Lince see Attachment 3. PRASA/MSJ must identify the source of the dry weather discharge and eliminate it if it is determined to be non-allowable, non-stormwater.

4. Across Quebrada Juan Méndez from Calle Ariel

As was also identified in February 2012 there was a large box culvert that was discharging into the Quebrada Juan Méndez (from the west side of the Quebrada). PRASA's June 14, 2012 letter in response to EPA indicated that this is not a PRASA box culvert.

5. Calle Lince and Calle Lira (Quebrada Juan Méndez drainage)

- a. Sanitary Sewer Overflow As shown in photograph 67 (and in Video 68) there was a sanitary sewer overflow from a manhole during dry weather at Calle Lince and Calle Lira. There was a strong sewage odor. As shown in photos 69 72 the flow from the overflowing manhole was entering stormwater catch basins on both sides of the street. The dry weather flow entering Quebrada Juan Méndez (south of Calle Ariel and north of Calle Lince) shown in photo 63, 64 and video 66 was suspected, but not confirmed, to be flowing from this Sanitary Sewer Overflow.
- b. As shown in photographs 75 there was a sanitary sewer manhole at Calle Lince adjacent to Quebrada Juan Méndez. The manhole extended a few feet above the ground surface. Sewage solids were seen up to the top stairs of the manhole, but were not seen up to the top of or outside of the manhole. Outside of this manhole as shown in photograph 76, there appeared to be a black rubber fixture/pipe coming out of the manhole at the ground level (and directed towards the Quebrada Juan Méndez). The fixture/pipe appeared to be sealed, but this should be verified.

D. RIO PIEDRAS RIVER/PUERTO NUEVO CANAL/QUEBRADA DOÑA ANA POTENTIAL NON COMPLIANCE ITEMS/AREAS OF CONCERN - April 25, 2012

1. Jesús T. Piñero (PR-17) and the Río Piedras River

As shown in photographs 77 – 79 there was a dry weather flow from a double barrel 7'x4' box culvert entering into the Río Piedras River (photo 78). There was no sewage odor or foaming associated with the discharge. Ammonia and pH screening with test strips showed a result of 0.25 mg/l and 6.5-7.0 SU respectively. The 2009 CSA report (See Attachment 4a) had identified that this location was potentially combined storm and sanitary. EPA could not locate the actual CSA inspection log, within the CSA report, but did locate the summary page and photos for this outfall. MSJ should verify that the dry weather flow from this outfall is allowable non-stormwater.

2. Jesús T. Piñero (PR-17) and Quebrada Doña Ana

As shown in photographs 87, 88 and 90 there is a dry weather flow from a large round sewer pipe into the Quebrada Doña Ana, northwest of the Jesús T. Piñero Bridge over the Quebrada (east of Calle Andalucia). As shown in photograph 86 there are hypochlorite feed tanks located above this outfall that are no longer in use. Photograph 90 shows that there is a small (approximately <1", white PVC line) that is broken and water is coming out of this line and entering the large round sewer and flowing into the Quebrada. If this is a broken water line, it should be removed to prevent backflow from the outfall and Quebrada during high water. Screening samples at this outfall had ammonia levels of approximately 0.5 mg/l and a pH of 6.5 to 7.0 SU. MSJ and PRASA must determine the source of this discharge and if there are sources of non-allowable non-stormwater.

3. Franklin Delano Roosevelt Ave. (PR-23) and the Puerto Nuevo Canal

a. South of PR-23 Bridge - As shown in photographs 90 to 94 there were at least two round sewer pipes with flap gates, visible) on the west side of the Puerto Nuevo Canal south of the Roosevelt Ave. (PR-23) bridge. The northernmost pipe visible from the bridge (photos 90 to 93) did have a dry weather flow. The southernmost pipe, visible from the bridge, (photo 94) did not appear to have a flow. MSJ and PRASA must determine the source of this dry weather flow and whether there is non-allowable non-stormwater. See Attachment 5a-1 for the MSJ map of the sewer system from the CSA report that depicts these outfalls at or near Calle Acapulco. EPA was not able to access the outfalls at this time to obtain a screening sample.

b. North of Roosevelt Ave. (PR-23) Bridge on West Side of the Puerto Nuevo Canal

As shown in photograph 96 during dry weather there was a round sewer pipe with little or no dry weather flow. A few minutes later after a brief, but intense rainfall, as shown in photographs 108 – 111, there was a turbid discharge from this outfall that was seen extending into the river. EPA was not able to access the outfall to

take a screening sample. MSJ/PRASA need to verify that only allowable non-stormwater is reaching this outfall. As shown in photographs 112 – 123, EPA opened several manholes on and around Calle Andalucia and Roosevelt Ave. (north side of intersection) to identify the source of the turbid discharge. EPA did not identify the source, but did note that there were manholes and/or sewers in need of cleaning (see photos 112, 116, 117, 119, and 123)

- c. North of Roosevelt Ave. (PR-23) Bridge on East Side of Puerto Nuevo Canal As described in attachment 5a, the CSA report identifies that there was a discharge from outfall G14a-S-004A that MSJ must investigate for potential sanitary sewage discharge. As shown in photos 97 to 107 there was a dry weather flow from this outfall during the EPA inspection, just prior to a rainfall event. The outfall is located just west of the Police headquarters building. EPA was not able to grab a screening sample from this outfall.
- 4. Behind 1150/1166 Ave. Américo Miranda and Quebrada Doña Ana EPA visited this discharge point located behind the Aquasports Kayak Shop 1166 Ave. Américo Miranda into the Quebrada (See Photo 134). EPA had photographed this dry weather discharge in March 2012. At the time of this April 25, 2012 inspection there was a dry weather discharge with a sewage odor from this location. Photographs 128 – 132 show the dry weather discharge at this location. As shown in attachment 6a, the 2009 CSA report identified that there were signs of raw sewage in this discharge. As shown in photographs 133, 135, 136 and 138 EPA began opening manholes on Ave. Américo Miranda. The manhole (Photo 133) that was more or less in line with the discharge point could not be opened. The manholes shown in photos 135 and 136 did not appear to have flow and the manhole in photo 138 appeared to be flowing normally. PRASA/MSJ must work to identify the source of this discharge and eliminate it and open the manhole shown in Photo 133 on Ave. Américo Miranda behind the Kayak shop. An access point to the Quebrada was located in the parking lot of the copy shop located just west of the kavak shop, but EPA did not enter the Quebrada at this time.

E. -OTHER

1. As shown in photograph 85 there was a flow to the east side of the Quebrada Doña Ana north of the Piñero Bridge (PR-17). EPA took a screening sample from the upstream stormwater manhole; the sample had no odor, ammonia concentration of approximately 0 mg/l and a pH of about 6 S.U.

F. ATTACHMENTS

1. Photograph Log and Photographs

- 2. Select 2009 CSA Report Segments/MSJ MS4 Maps Quebrada San Antón
- 3. MSJ MS4 Map, Calle Lira/Calle Lince, Quebrada Juan Méndez
- 4. CSA Report 2009 Río Piedras River and PR-17 (Piñero)
- 5. CSA Report 2009, Puerto Nuevo Canal and Roosevelt Ave. (PR-23)
- 6. CSA Report 2009 and MSJ MS4 Map. Américo Miranda and Quebrada Doña Ana
- 7. March 2012 precipitation data at San Juan Luis Muñoz Marín Int. Airport
- 8. Original videos/photos from the inspection

Photographs, Municipality of San Juan Reconnaissance Inspection, April 23 and 25, 2012, Taken by Murray Lantner, P.E., Environmental Engineer, Nikon Coolpix P510

Photo ID	Data	Photo Description	Municipality
No.	Date	Prioto Description	Carolina/San
		Double barrel rectangular sewer pipe with no apparent dry weather flow	Juan
		into Quebrada San Antón. The outfall is to the Northwest of the Campo	(Collection
		Rico Bridge over the Quebrada at the intersection of Calle Carlos De La	System could
DSCN0005	4/23/2012	Torre and Avenida Campo Rico.	be San Juan)
			Carolina/San
			Juan
			(Collection
		Outfall into Quebrada San Antón with vegetation growth around the	System could
DSCN0006	4/23/2012	outfall near Calle Belén Zequeira off of Calle De La Torre.	be San Juan)
			Carolina/San
			Juan (Collection
		Outfall into Quebrada San Antón with vegetation growth around the	System could
DSCN0007	4/23/2012	outfall near Calle Belén Zequeira off of Calle De La Torre.	be San Juan)
D3CN0007	4/23/2012	outrail flear Calle Belefi Zequella off of Calle De La Forre.	Carolina/San
			Juan
			(Collection
		Outfall into Quebrada San Antón with vegetation growth around the	System could
DSCN0008	4/23/2012	outfall near Calle Belén Zequeira off of Calle De La Torre.	be San Juan)
		Dry weather trickle into the Quebrada San Antón at Calle Hernández and	
DSCN0009	4/23/2012	Calle de La Torre (Just north of School).	San Juan
		Dry weather trickle into the Quebrada San Antón at Calle Hernández and	
DSCN0010	4/23/2012	Calle de La Torre (Just north of School).	San Juan
DSCN0011	4/23/2012	Missing manhole cover at Calle Ledru and Calle Carlos de La Torre.	San Juan
DSCN0012	4/23/2012	Missing manhole cover at Calle Ledru and Calle Carlos de La Torre.	San Juan
DSCN0013	4/23/2012	Street sign at Calle Amalio Roldán and Calle Carlos de la Torre.	San Juan
DSCN0014	4/23/2012	Catch basin at or near Calle Amalio Roldán and Calle Carlos de la Torre.	San Juan
		Outfall to Quebrada San Antón at or near Calle Amalio Roldán and Calle	
DSCN0015	4/23/2012	Carlos de la Torre.	San Juan
		Outfall to Quebrada San Antón at or near Calle Amalio Roldán and Calle	
DSCN0016	4/23/2012	Carlos de la Torre.	San Juan
		Dry weather discharge from pipe on southwest side of the Quebrada San	
DSCN0020	4/23/2012	Antón (San Juan) at Calle Antonio Luciano and Garcilaso De La Vega.	San Juan
		Quebrada San Antón, photo taken from San Juan side at Calle Antonio	
DSCN0021	4/23/2012	Luciano and Garcilaso De La Vega.	San Juan
			Carolina/San
DSCN0024	4/23/2012	Street sign for Calle Garcilaso de la Vega near Nicolas Aguayo, San Juan.	Juan

Photographs, Municipality of San Juan Reconnaissance Inspection, April 23 and 25, 2012, Taken by Murray Lantner, P.E., Environmental Engineer, Nikon Coolpix P510

Photo ID	Data	Photo Description	Municipality
No.	Date	Photo Description	Carolina/San
DSCN0025	4/23/2012	Street sign for Calle La Riviera and Calle Lorena, Carolina.	Juan
DSCN0026	4/23/2012	Street sign for Calle Nicolas Aguayo near Calle Garcilaso de la Vega, San Juan.	Carolina/San Juan
DSCN0027	4/23/2012	Sewage flow from onto street (mixed with stormwater). The puddle on the sidewalk shows algal growth and had a sewage odor. The sanitary wastewater flow flows into the street and then enters the Quebrada San Antón near 1232 Nicolas Aguayo, San Juan just west of Calle Garcilaso de la Vega.	San Juan
DSCN0028	4/23/2012	House at 1232 Nicolas Aguayo, reported that there were sewer backs up at this location.	San Juan
DSCN0029	4/23/2012	Sewage flow on sidewalk 1232 Nicolas Aguayo, San Juan.	San Juan
DSCN0030	4/23/2012	Sewage and stormwater flow on the street at Calle Nicolas Aguayo/Garcilaso de la Vega. Flowing towards a storm inlet to Quebrada San Antón. Note the vegetation growth along the street.	San Juan
DSCN0031	4/23/2012	Sewage and stormwater flow on the street at Calle Nicolas Aguayo/Garcilaso de la Vega. Flowing towards a storm inlet to Quebrada San Antón.	San Juan
DSCN0032	4/23/2012	Sewage and stormwater flow on the street at Calle Nicolas Aguayo/Garcilaso de la Vega. Flowing towards a storm inlet to Quebrada San Antón.	San Juan
DSCN0033	4/23/2012	Sewage and stormwater flow on the street at Calle Nicolas Aguayo/Garcilaso de la Vega. Flowing towards a storm inlet to Quebrada San Antón. Note the vegetation growth along the street.	San Juan
DSCN0034	4/23/2012	Manhole in front of 1228 Nicolas Aguayo and 1229 Nicolas Aguayo was not flowing and appeared obstructed.	San Juan
DSCN0035	4/23/2012	Manhole in front of 1228 Nicolas Aguayo and 1229 Nicolas Aguayo was not flowing and appeared obstructed.	San Juan
DSCN0036	4/23/2012	Manhole on Nicolas Aguayo near Garcilaso de la Vega was flowing.	San Juan
DSCN0037	4/23/2012	Video of flow from disconnected house lateral. Lateral disconnected to prevent backups.	San Juan
DSCN0038	4/23/2012	Disconnected house lateral where flow from the lateral was flowing onto the sidewalk, puddle and ultimately flowing into the Quebrada San Antón.	San Juan

Photographs, Municipality of San Juan Reconnaissance Inspection, April 23 and 25, 2012, Taken by Murray Lantner, P.E., Environmental Engineer, Nikon Coolpix P510

Photo ID			
No.	Date	Photo Description	Municipality
	*	Sanitary wastewater and stormwater on sidewalk near 1232 Nicolas	
DSCN0039	4/23/2012	Aguayo, ultimately flows into Quebrada San Antón.	San Juan
		Sanitary wastewater and stormwater on sidewalk near 1232 Nicolas	
DSCN0040	4/23/2012	Aguayo, ultimately flows into Quebrada San Antón.	San Juan
DSCN0041	4/23/2012	Sanitary wastewater and stormwater on sidewalk near 1232 Nicolas Aguayo, ultimately flows into Quebrada San Antón.	San Juan
D3CN0041	4/23/2012		San saan
DSCN0042	4/23/2012	Sewer pipe discharging into the western side of Quebrada San Antón behind 1232 Nicolas Aguayo, San Juan.	San Juan
550110012	1/23/2012	Video of Sewer pipe discharging into the western side of Quebrada San	
DSCN0043	4/23/2012	Antón behind 1232 Nicolas Aguayo, San Juan.	San Juan
		Sewer pipe discharging into the western side of Quebrada San Antón	
DSCN0044	4/23/2012	behind 1232 Nicolas Aguayo, San Juan.	San Juan
		Quebrada San Antón just downstream of the discharge pipe behind 1232	
DSCN0045	4/23/2012	Nicolas Aguayo	Sasn Juan
		Manhole located at Calle Nicolas Aguayo between 1229 and 1228	
DSCN0046	4/23/2012	residences, there was high amount of solids.	San Juan
		Manhole located at Calle Nicolas Aguayo between 1229 and 1228 residences, there was high amount of solids, apparently there was a	
		blockage in the segment, because on the next manhole near Residence	
DSCN0047	4/23/2012	1232 the flow was little.	San Juan
DSCN0048	4/23/2012	Discharge point Quebrada Juan Méndez and Ave. José De Diego (PR-47).	San Juan
DSCN0049	4/23/2012	Discharge point Quebrada Juan Méndez and Ave. José De Diego (PR-47).	San Juan
DSCN0050	4/23/2012	Discharge point Quebrada Juan Méndez and Ave. José De Diego (PR-47).	San Juan
DSCNOOSO	4/23/2012	Manhole located at the corner of Calle Lealtad and José De Diego (PR-	
DSCN0051	4/23/2012	47).	San Juan
		Catch Basin at Lealtad and José De Diego (PR-47) that is in need of	
DSCN0052	4/23/2012	cleaning.	San Juan
DSCN0053	4/23/2012	Pooled water at Lealtad and José De Diego (PR-47).	San Juan
		Manhole at Calle Ariel adjacent to Quebrada Juan Méndez, there was	
		debris indicative of a sanitary sewer overflow around the top of the	
		manhole and outside and around the manhole (paper, rags, etc.). The	
DSCN0054	4/23/2012	cover of the manhole was partially off.	San Juan

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Photo ID No.	Date	Photo Description	Municipality
DSCN0055	4/23/2012	Manhole at Calle Ariel adjacent to Quebrada Juan Méndez, there was debris indicative of a sanitary sewer overflow around the top of the manhole and outside and around the manhole. The cover of the manhole was partially off.	San Juan
DSCN0056	4/23/2012	Flow from a box culvert into Quebrada Juan Méndez on the east side of Quebrada Juan Méndez, opposite Calle Ariel.	San Juan
DSCN0057	4/23/2012	Flow from a box culvert into Quebrada Juan Méndez on the east side of Quebrada Juan Méndez, opposite Calle Ariel.	San Juan
DSCN0058	4/23/2012	Flow from a box culvert into Quebrada Juan Méndez on the east side of Quebrada Juan Méndez, opposite Calle Ariel.	San Juan
DSCN0059	4/23/2012	Inside the manhole (shown in photos 54 and 55) at Calle Ariel.	San Juan
DSCN0060	4/23/2012	Inside the manhole (shown in photos 54 and 55) at Calle Ariel.	San Juan
DSCN0061	4/23/2012	Blurry Photo	San Juan
DSCN0062	4/23/2012	Wall along the east side of Quebrada Juan Méndez south (upstream) of Calle Ariel.	San Juan
DSCN0063	4/23/2012	Dry weather discharge into Quebrada Juan Méndez along the east side of Quebrada south (upstream) of Calle Ariel.	San Juan
DSCN0064	4/23/2012	Dry weather discharge into Quebrada Juan Méndez along the east side of Quebrada south (upstream) of Calle Ariel	San Juan
DSCN0065	4/23/2012	Dry weather discharge into Quebrada Juan Méndez along the east side of Quebrada south (upstream) of Calle Ariel.	San Juan
DSCN0066	4/23/2012	Video of dry weather discharge with some suds flowing into Quebrada Juan Méndez just south (upstream) of Calle Ariel on the east side of the Quebrada Juan Méndez. (Video mistakenly stated upstream of Calle Lealtad).	San Juan
DSCN0067	4/23/2012	Sanitary sewer overflow at Calle Lira and Calle Lince. Sewage enters the stormwater catch basin.	San Juan
DSCN0068	4/23/2012	Video of Sanitary Sewer Overflow at Calle Lira and Calle Lince flowing into the storm water catch basin.	San Juan
DSCN0069	4/23/2012	Sanitary sewer overflow at Calle Lira and Calle Lince. Sewage enters the stormwater catch basin.	San Juan
DSCN0070	4/23/2012	Sanitary sewer overflow at Calle Lira and Calle Lince. Sewage enters the stormwater catch basin shown in this photo.	San Juan
DSCN0071	4/23/2012	Sanitary sewer overflow at Calle Lira and Calle Lince. Sewage enters the stormwater catch basin.	San Juan

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Photo ID No.	Date	Photo Description	Municipality
		Sanitary sewer overflow at Calle Lira and Calle Lince. Sewage enters the	
DSCN0072	4/23/2012	stormwater catch basin.	San Juan
DSCN0073	4/23/2012	Street sign at Calle Lira and Calle Lince.	San Juan
DSCN0074	4/23/2012	Street sign at Calle Lira and Calle Lince.	San Juan
DSCN0075	4/23/2012	Sanitary Sewer Manhole at Calle Lince adjacent to Quebrada Juan Méndez. The manhole extended a few feet above the ground surface, sewage solids were seen up to the top stairs of the manhole, but were not seen up to the top of or outside of the manhole.	San Juan
DSCN0076	4/23/2012	Outside of manhole shown in photo 75, there appeared to be a black rubber fixture/pipe coming out of the manhole at the ground level. This pipe appeared to be sealed.	San Juan
DSCN0077	4/25/2012	Dry weather flow from double 7' x 4' box culvert at the Jesús T. Piñero (PR-17) and the Río Piedras River.	San Juan
DSCN0078	4/25/2012	Dry weather flow from double 7' x 4' box culvert at the Jesús T. Piñero (PR-17) and the Río Piedras River entering the Río Piedras River.	San Juan
DSCN0079	4/25/2012	Dry weather flow from double 7' x 4' box culvert at the Jesús T. Piñero (PR-17) and the Río Piedras River.	San Juan
DSCN0080	4/25/2012	Photo round sewer at Río Piedras River, no flow, PR-17 (Piñero) bridge.	San Juan
DSCN0081	4/25/2012	Sewer pipe apparently flowing normally (sewer not surcharged) along the east bank of the Río Piedras River north of the Jesús T. Piñero (PR-17) bridge.	San Juan
DSCN0082	4/25/2012	Sewer pipe apparently flowing normally (sewer not surcharged) along the east bank of the Río Piedras River north of the Jesús T. Piñero (PR-17) bridge.	San Juan
DSCN0083	4/25/2012	Two large diameter round sewers, with no flow, leading to the Río Piedras River to the north of PR-17 and to the north of the entrance ramps for PR-18 and PR-17.	San Juan
DSCN0084	4/25/2012	Río Piedras River to the north of PR-17 and to the north of the entrance ramps for PR-18 and PR-17.	San Juan
DSCN0085	4/25/2012	Dry weather flow from pipe into the east side of the Quebrada Doña Ana, north of the Piñero (PR-17) Bridge.	San Juan
DSCN0086	4/25/2012	Hypochlorite feed tanks no longer in use on the north west side of the Piñero (PR-17) Bridge over the Quebrada Doña Ana above large round sewer with a dry weather flow.	San Juan

Photographs, Municipality of San Juan Reconnaissance Inspection, April 23 and 25, 2012, Taken by Murray Lantner, P.E., Environmental Engineer, Nikon Coolpix P510

Photo ID No.	Date	Photo Description	Municipality
DSCN0087	4/25/2012	Large round sewer with a dry weather flow into the Quebrada Doña Ana on the northwest side of the Pinero (PR-17) Bridge.	San Juan
DSCN0088	4/25/2012	Large round sewer with a dry weather flow into the Quebrada Doña Ana on the northwest side of the Piñero (PR-17) Bridge.	San Juan
DSCN0089	4/25/2012	Hole in the concrete wall at the northwest side of the Quebrada Doña Ana relative to Pinero (PR-17) Bridge.	San Juan
DSCN0090	4/25/2012	Large round sewer with a dry weather flow into the Quebrada Doña Ana on the northwest side of the PR-17 (Piñero) bridge. As shown in the photo there is a small PVC line (appears to be less than an inch with flow coming out of it and entering the large round sewer).	San Juan
DSCN0091	4/25/2012	The northern round sewer with a flap gate with a dry weather discharge located on the west side of the Puerto Nuevo Canal, south of the Roosevelt Ave. (PR-23) Bridge.	San Juan
DSCN0092	4/25/2012	The northern round sewer with a flap gate with a dry weather discharge located on the west side of the Puerto Nuevo Canal, south of the Roosevelt Ave. (PR-23) Bridge.	San Juan
DSCN0093	4/25/2012	The northern round sewer with a flap gate with a dry weather discharge located on the west side of the Puerto Nuevo Canal, south of the Roosevelt Ave. (PR-23) Bridge.	San Juan
DSCN0094	4/25/2012	Blank Video	San Juan
DSCN0095	4/25/2012	The southern round sewer with a flap gate located on the west side of the Puerto Nuevo Canal, south of Roosevelt Ave. (PR-23) Bridge.	San Juan
DSCN0096	4/25/2012	Round stormsewer on the west bank of the Puerto Nuevo Canal with little or no dry weather flow, north of the Roosevelt Ave. (PR-23 Bridge).	San Juan
DSCN0097	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0098	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0099	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan

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Photo ID No.	Date	Photo Description	Municipality
DSCN0100	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0101	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0102	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0103	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0104	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0105	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0106	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0107	4/25/2012	Dry weather flow from Outfall on the east side of the Puerto Nuevo Canal, North of the Roosevelt Ave. (PR-23) Bridge, adjacent to Police building.	San Juan
DSCN0108	4/25/2012	North of Roosevelt Ave. PR-23 Bridge on West Side of the Puerto Nuevo Canal turbid discharge from outfall. The turbid plume from the outfall was seen extending into the Puerto Nuevo Canal.	San Juan
DSCN0109	4/25/2012	North of Roosevelt Ave. PR-23 Bridge on West Side of the Puerto Nuevo Canal turbid discharge from outfall. The turbid plume from the outfall was seen extending into the Puerto Nuevo Canal.	San Juan
DSCN0110	4/25/2012	North of Roosevelt Ave. PR-23 Bridge on West Side of the Puerto Nuevo Canal turbid discharge from outfall. The turbid plume from the outfall was seen extending into the Puerto Nuevo Canal.	San Juan

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Photo ID			
No.	Date	Photo Description	Municipality
DSCN0111	4/25/2012	North of Roosevelt Ave. PR-23 Bridge on West Side of the Puerto Nuevo Canal turbid discharge from outfall. The turbid plume from the outfall was seen extending into the Puerto Nuevo Canal.	San Juan
DSCN0112	4/25/2012	Manhole on Calle Andalucia north of Roosevelt Ave. near the building in photograph 113. The level of water in the sewer was fairly high.	San Juan
DSCN0113	4/25/2012	Building near manhole shown in photo 112 on Calle Andalucia north of Roosevelt Ave.	San Juan
DSCN0114	4/25/2012	Building near manhole shown in photo 112 on Calle Andalucia north of Roosevelt Ave.	San Juan
DSCN0115	4/25/2012	Manhole at or about Calle Andalucia and Ave. Roosevelt (northern side).	San Juan
DSCN0116	4/25/2012	Manhole at or about Calle Andalucia and Ave. Roosevelt (northern side).	San Juan
DSCN0117	4/25/2012	Apparent Sanitary sewer, with floating material and cockroaches. The water level in the sewer appeared fairly high. The manhole was located near United Tile store on the north side of Roosevelt Ave. (PR-23) east of Calle Andalucia.	San Juan
DSCN0118	4/25/2012	United Tile store on Roosevelt Ave. (PR-23) east of Calle Andalucia and near the manhole shown in photographs 117 and 119.	San Juan
DSCN0119	4/25/2012	Apparent Sanitary sewer, with material with floating material and cockroaches. The water level in the sewer appeared fairly high. The manhole was located near United Tile store on the north side of Roosevelt Ave. (PR-23) east of Calle Andalucia.	San Juan
DSCN0120	4/25/2012	Manhole on the northern side of Roosevelt Ave. (PR-23) west of the Puerto Nuevo Canal and east of Calle Andalucia. And west of the manhole shown in Photo 121.	San Juan
DSCN0121	4/25/2012	Potential storm sewer line manhole on the northern side of Roosevelt Ave. (PR-23) west of the Puerto Nuevo Canal and east of Calle Andalucia. This was following a rain event and the sewer appeared to be flowing normally.	San Juan
DSCN0122	4/25/2012	Potential storm sewer line manhole on the northern side of Roosevelt Ave. (PR-23) west of the Puerto Nuevo Canal and east of Calle Andalucia. This was following a rain event and the sewer appeared to be flowing normally.	San Juan

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Photo ID	Data	Dhata Description	Municipality
No.	Date	Photo Description	Municipality
DSCN0123	4/25/2012	Manhole on northern sidewalk of Roosevelt Ave. (PR-23) west of the Puerto Nuevo Canal and east of Calle Andalucia. The water level in the sewer was high and appeared to be in need of cleaning.	San Juan
DSCN0124	4/25/2012	Large diameter round sewer on east side of the Quebrada Doña Ana south of the Jesús T. Piñero (PR-17 Bridge).	San Juan
DSCN0125	4/25/2012	Quebrada Doña Ana - Near Large diameter round sewer on east side of the Quebrada Doña Ana south of the Jesús T. Piñero (PR-17 Bridge)	San Juan
DSCN0126	4/25/2012	Quebrada Doña Ana - Behind Kayak Shop Ave. Américo Miranda near dry weather overflow shown in photos 128 to 132	San Juan
DSCN0127	4/25/2012	Quebrada Doña Ana - Behind Kayak Shop Ave. Américo Miranda near dry weather overflow shown in photos 128 to 132	San Juan
DSCN0128	4/25/2012	Dry weather flow from sewer into Quebrada Doña Ana behind (north of) stores located at (Copy Shop/Aquasports Kayak) 1150/1166 Ave. Américo Miranda	San Juan
DSCN0129	4/25/2012	Dry weather flow from sewer into Quebrada Doña Ana behind (north of) stores located at (Copy Shop/Aquasports Kayak) 1150/1166 Ave. Américo Miranda	San Juan
DSCN0130	4/25/2012	Dry weather flow from sewer into Quebrada Doña Ana behind (north of) stores located at (Copy Shop/Aquasports Kayak) 1150/1166 Ave. Américo Miranda	San Juan
DSCN0131	4/25/2012	Dry weather flow from sewer into Quebrada Doña Ana behind (north of) stores located at (Copy Shop/Aquasports Kayak) 1150/1166 Ave. Américo Miranda	San Juan
DSCN0132	4/25/2012	Dry weather flow from sewer into Quebrada Doña Ana behind (north of) stores located at (Copy Shop/Aquasports Kayak) 1150/1166 Ave. Américo Miranda	San Juan
DSCN0133	4/25/2012	Manhole on Ave. Américo Miranda west of the Kayak Shop that is paved shut	San Juan
DSCN0134	4/25/2012	Aquasports Kayak shop on Ave. Américo Miranda	San Juan
DSCN0135	4/25/2012	Manhole, no flow seen, In the Vicinity of Ave. Américo Miranda between Calle 21 SE and Calle 23 SE	San Juan
DSCN0136	4/25/2012	Manhole, no flow seen, In the Vicinity of Ave. Américo Miranda between Calle 21 SE and Calle 23 SE	San Juan
DSCN0137	4/25/2012	Blurry Picture	San Juan

Photographs, Municipality of San Juan Reconnaissance Inspection, April 23 and 25, 2012, Taken by Murray Lantner, P.E., Environmental Engineer, Nikon Coolpix P510

Photo ID No.	Date	Photo Description	Municipality
		Manhole, no flow seen, In the Vicinity of Ave. Américo Miranda between	
DSCN0138	4/25/2012	Calle 21 SE and Calle 23 SE	San Juan

























































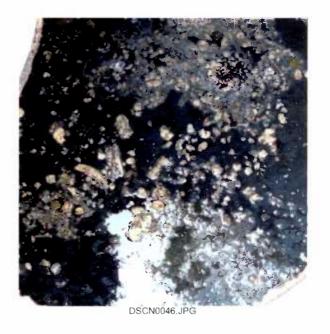






































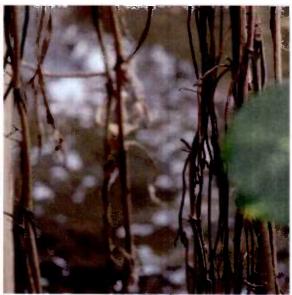
















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San Juan, Puerto Rico













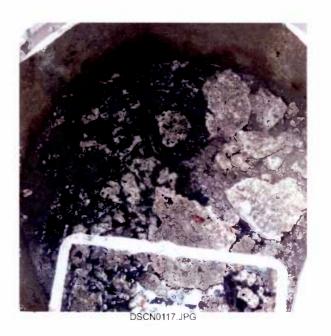


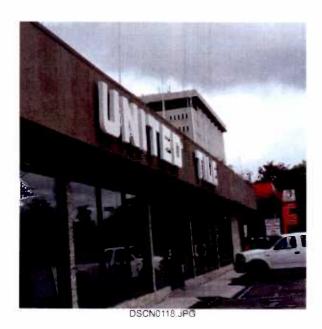
















Municipality of San Juan Recon Inspection































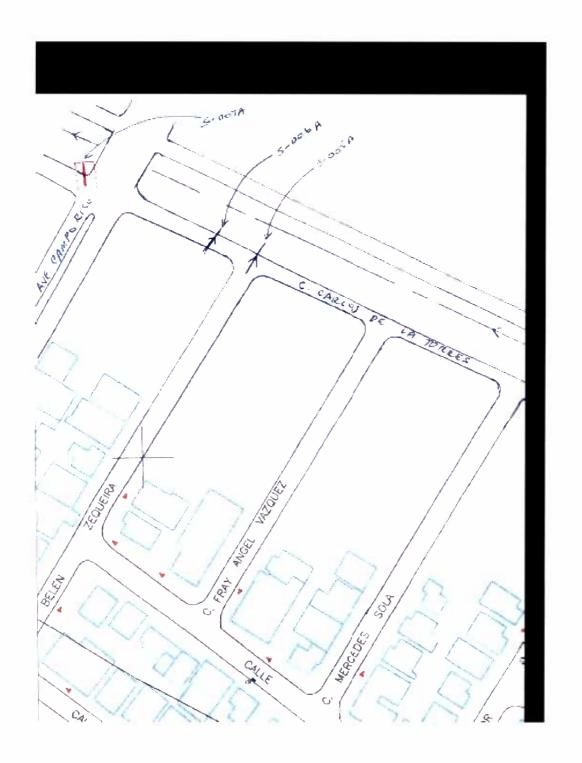








Attachment 2a-1 - Quebrada San Anton - Calle Carlos De La Torres and Calle Belen Zequeira - Sabana Llana Country Club Q15d



Att. 2a-2, Q15d-S005a, Quebrada San Anton, Sabana Llana Country Club Calle Belen Zequeira and Calle Carlos de la Torres

O etion 1: Backgrou	nd Data		0.112	- 005A	
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LESIA ESTUCIUTA ESTA CA ESCITION 2: OUTFAL LOCATION	A. DESCRIPTION MATERIAL RCP COMP	☐ Circu'er ☐ Dipoted	No No No Single Double	DIMENSIONS (IN) Diameter/Disensions: WO SE PURO VER DIAMETRO D DIMENSIONES	In Water. Property Partielly Fully With Sediment:
LESIA ESTUCIUTA ESTA CA ESCITION 2: OUTFAL LOCATION	A. DESCRIPTION MATERIAL RCP CVP PVC HDPE CI Steel	☐ Circular ☐ EipScal ☐ Box ☐ Other:	No No No Single Double	DIMENSIONS (IN) Diameter/Diviensions: WO SE PUPO VER DIAMETRO DIMENSIONES APROXIMORAS	in Water: Partially Partially Fully With Sediment: No Partially
LESIA ESTUCIUTA ESTA CA ESCITION 2: OUTFAL LOCATION	A. DESCRIPTION MATERIAL RCP PVC HDPE Steel Chert_/RC	☐ Circu'er ☐ Dipoted	No No No Single Double	DIMENSIONS (IN) Diameter/Distansions: WO SE PUPO URR DIAMETRO DIMENSIONES APROXIMAPES Dopti:	in Water: Partially Partially Fully With Sediment: No Partially
LESIA ESTUCIUTA ESTA CA SECTION 2: OUTFAL LOCĂTION	DESCRIPTION MATERIAL ROP ROP PVC HDPE Steel Coonete Burthen	☐ Circular ☐ EipScal ☐ Box ☐ Other:	No No No Single Double	DIMENSIONS (IN) Diameter/Dimensions: WO SE PUDO VER DIAMETRO DOINENSIONES APROXIMATES Dopth: Top Width:	in Water: Partially Partially Fully With Sediment: No Partially
Esta estructura esta en CECTION 2: OUTFAI LOCATION COCATION	DESCRPTION MATERIAL RCP CMP PVC HDPS Steel Control Rethen Fig-ray	Circuler Dipoled Depoled Other: Trapezold	No No No Single Double	DIMENSIONS (IN) Diameter/Distansions: WO SE PUPO URR DIAMETRO DIMENSIONES APROXIMAPES Dopti:	in Water: Partially Partially Fully With Sediment: No Partially
LOCATION LOCATION LOCATION	DESCRIPTION MATERIAL ROP ROP PVC HDPE Steel Coonete Burthen	Circuler Circuler ElpScel Bex Other: Trapezold Parabolic Other:	No No No Single Double	DIMENSIONS (IN) Diameter/Dimensions: WO SE PUDO VER DIAMETRO DOINENSIONES APROXIMATES Dopth: Top Width:	in Water: Partially Partially Fully With Sediment: No Partially



IMG_5122



IMG_5123

Att. 2a-3, Q15d-S005a, Quebrada San Anton, Sabana Llana Country Club Calle Belen Zequeira and Calle Carlos de la Torres



Odor				ESCRIPTION	170			146	LATIVE SEVERITY INDEX	Aştırı
		Sewage	☐ Rancid/sou	r 🗌 Petroleun	ı/gas		☐ 1 - Faint		2 Easily detected	3 – Noticeable from a distance
Color		Clear	☐ Brown	Grny	☐ Yellow ☐Other:		1 - Faint cole sample bott		2 - Clearly visible in sample bottle	3 - Clearly visible in outfall flow
Turbidity				Sec severity			☐ 1 = Slight clo	ndiness	2 - Cloudy	☐ 3 — Opaque
Figurables -Does Not Include -Preshill		Sewage (foilet Paper, etc.)	Suds Other			☐ 1 — Few/sligh	t; origin	2 - Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (c.g., obvious oil sheen, suds, or floatin sunitary materials)
Section 4: Physical Indic Are physical indicators th	cators for Both at are not relate	Howing and to flow p	nd Non-Flow resent?	Yes No		-17				Agrica superior program (A)
INDICATOR	CHECKSTOP	esent		Type and an order to be a fair	ESCRIPTION		٠.		COMMEN	ns.
Outfall Damage			Spalling, C	cracking or Chip	pping	Pecling Pai	nt			
Deposits/Stains	: D		Oily F	iow Line 🔲	Paint 🗆	Other:				
Abnormal Vegetation	X		Excessive	☐ Inhibited	•					
Poor pool quality	Z 2 O		Odors Suds	Colors Excessive	∏ Floatables Mgae	Oil She	CII			
Pipe benthic growth			☐ Brown	Orange	☐ Green	Other.				
Recommendations:										
M Immediate Action	luter	mediate action		Long time action	961					
Cleaning, uncover										

Att. 2a-4 Q15d-S006a, Quebrada San Anton, Sabana Llana Country Club – Calle Belen Zequeira and Calle Carlos de la Torres

Desc. /	1		Optical ID.	5-006A	
Ringade No. 1		,	Body of Water	DEPA SAN A	YTON
	O15 d Regi				
BUNKSARAWI	CLANA Section Co	UNTRY CLUB	GPS Sport	GPS EMIK I	l
Street	PE CA TORRI		5/2·	, 5/2/	
Land the in Distinge	Aven (Check all that apply)				
C Industria:			□ Орен Брасе		
Libra-Ulthan Reyel	locted		☐ fantitational		
Datatan Residen	114-		Other		
Correral			Known Industries		
Estados baccara esta e	ni lus planto del Mamuero de Se	rit 🔲 - Penatu	A Su		
SECTION 2: COULD	EL DESCRIPTOR				
SECTION 2. CHIEFA	ILDISCOLUCION MATERIAL	5	наре	OIMENSTONS (IN.)	SUBMERGED
		S Distanción Distanción Distanción Distanción Distanción Distanción	HAPE Dank Dank Dink Other	OIMENSIONS (IN.)	SUBMERGED In Warri Chia Earlisty Fairly Wait Schward Farmin
LOCATION	MATERIAL MINOR GOOD FINE GOOD SINOR	Pscurate Lepton	Moreje I tautie I tauk	(Summer Degenoes)	In Winer Partiety Partiety First With Sectional of
EOCATION Relation English	MATERIAL	Pf-Citrals Fogues Box Otto Otto Otto Otto Imposed Otto Percente	Moreje I tautie I tauk	lismani Directore 1/2 Liepti Lepti	In Winer Partiety Partiety First With Sectional of

Flow Passerett Flow Description

(If present)

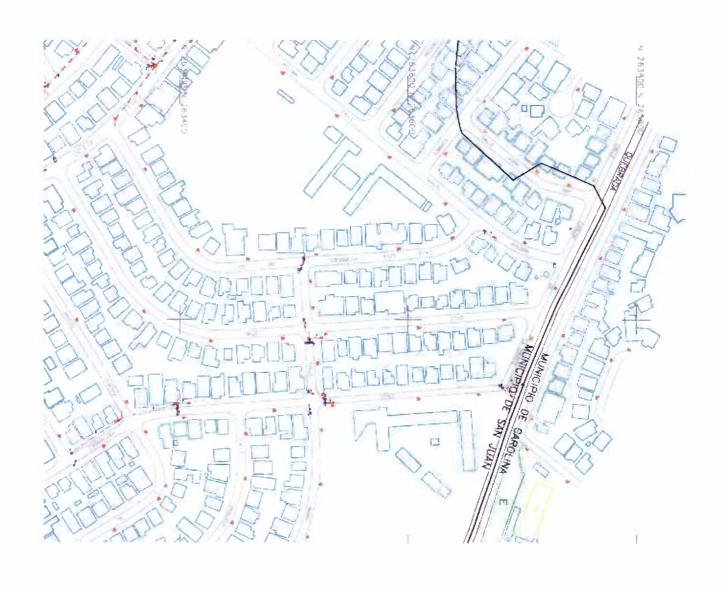
U Mindenne - E Sarribotion





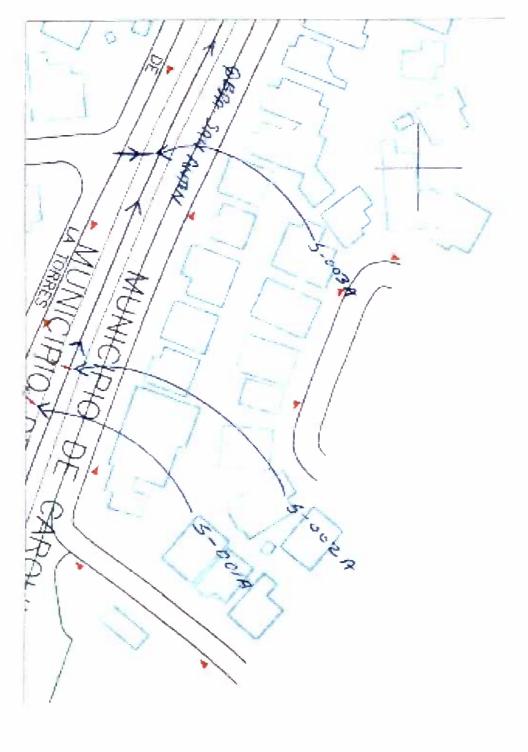
(Att. 2a-5)Q15d-S006a, Quebrada San Anton, Sabana Llana Country Club – Calle Belen Zequeira and Calle Carlos de la Torres

CHECK if Present		DESCRI	TION		RE	LATIVE SEVERITY INDEX	(1-3)
	Sewage	□ Rancid/Sour □ Pe	roxemigs		- Paint	2 = 1:asity defected	3 = Noticeable from a distance
534	☐ Clear		,	·		2 - Clearly visible an sample buttle	□ 3 - C⁄carly visible in outful flow
		See sev	rity	<u> </u>	- Slight cloudiness	□ 2 - Clouds	. □ 3 Ородие
					U · ·	2 - Some; intreations of origin (e.g., possible suds or oil schoon)	3 - Sause, origin clear (e.g., obvious or) sheen, suds, or floatin sunstary materials)
	177						
CHECK If	Present		DESCRIPTION	4	2.4	COMMEN	TS
Į.]	Spalling, Cracking Correcting	x Chapting 🔲	Peeling Paint			
]	Oxly How take	Paint 🗍	Olixe:	Ú, t		
	1	☐ fixcessive ☐ tanib	ard				
				Oil Steen			
		☐ Brown ☐ Oran	ge Green	Other:			
☐ lai	lermediate actio	a 🔲 Longton	ie action				
	Present	Present Sewage Solfide Sewage Solfide Sewage Solfide Pearles Sewage Pearles CHECK if Present	Sewage Rancid'sonr Policy Solide Other	Sewage Rancid Sour Petroleum/grs Solide Other	Sewage Rancid Sour Petroleum/ses	Sewage Rancid Som Petroleum/grs 1 - Familia Solifide Other Cray Yellow 1 - Familia colors in sample bottle Sewage Red Other 1 - Familia colors in sample bottle Sewage (Toilet Paper, etc.) Solis 1 - Fewallight; origin met obvious Sewage (Toilet Paper, etc.) Solis 1 - Fewallight; origin met obvious Pembleum (aid sheen) Other 1 - Fewallight; origin met obvious CHECK if Present DESCRIPTION Spating Cracking or Chapping Peeling Panil Certosion Other Other Oxcessive tabibled Other Oxcessive Tabibled Other Other Other Other	Sewage Ramerd Serin Petroleum/grs 1 - Finit 2 - Invery detected



Att. 2b-1 – Area of R-15-C (S001a-S003a) Quebrada San Anton – Sabana Llana Country Club from MSJ MS4

Attachment 2b-2 Quebrada San Anton – CSA Map Sabana Llana Country Club Carpeta 11 - R 15c S001a and S003a



Attachment 2b-3 Quebrada San Anton – CSA Report Sabana Llana Country Club Carpeta 11 – R 15c S001a – Calle Hernandez and Carlos De La Torres

ection 1: Backgrou			Outside:	5-001A	
DE 08/	00 /09				
Brigade No. 4			Day of Ages	GBDA SAN	ANTON
0-4 (Cheneula A		3		-	
Hartic SABBANA	exputy income Con	WTRY CLUB	698 Uc#	্ ব	IPS LMICS
Super:	nees		Photo #1:	6,5107	
	trans (Check) of that apply (
☐ h ásti sl			□ Open \$7##		
Maria Union Reside	લાંનો		Lamireimel [
🖺 Saharlan Beridenti	년		Other		
[] Commod			Karen Interre	er V	
Notes:	<u> </u>				
Committee and the	a last primitive del Minarcopia del Sen	mant Mar	□ No		
SECTION 2: OUTFAI	: Descuesco			DIMENSION	(\$110)] SUSMERGED
			Li No	DIMENSION Digrater Circuit	neat la Parier
Section 2: Outpat	S Description		ME .		neat la Parier
Section 2: Outpat	Degraterion MATERIAL RECT COMP	(K) is the second of the secon	A Street	Planeter Circuit	one: In Widom No Discourse Filip
SECTION 2: OUTFAI LOCATION	BESCHERON MATERIAL EGG COMP D PUR D PUR	(Kings	Strets	Planeter Circuit	Service Servic
SECTION 2: OUTFAI LOCATION	MAYERIÁL MAYERIÁL POR CHEMO O STORA	Without Explicit	Strete Driste	Planeter Circuit	one: In Widom No Discourse Filip
SECTION 2: OUTFAI LOCATION	Designation MATERIAL RECT COMP DEVC DESIGN Stell Coher	Posts	Strete Driste	PlaneterCircums 36	Section Sectin Section Section Section Section Section Section Section Section
SECTION 2: OUTFAT LOCATION	Designation MAYERIÁL PAGE DESIGNATION PAGE DESIGNATION Other Colore	Parkyie	Strete Driste	PlaneterCitizand 36	bias is white No is a facility in the Sality in the Sality is a facility in the Sality
LOCATION LOCATION	Beginnender MAYERIAL ROT COMP OVER PURE Cother Cother Cother Entitles	Posts	Strete Driste	PlaneterCircums 36	bias is white No is a facility in the Sality in the Sality is a facility in the Sality
LOCATION LOCATION	MATERIAL MATERIAL POTE CMP Other Characte Earlies Other Theres	Constant	Strete Driste	PlaneterCitizand 36	bias is white No is a facility in the Sality in the Sality is a facility in the Sality
ECTION 1: OUTFAI LOCATION Circul Pipe Open Smitnigs	MATERIAL MATERIAL ROT COMP OVER DEPENDENCE Connecte Connecte	Explose Explose Ban Other Trayword Parabone Other	Stretz Dirible Office	PlaneterCitizand 36	bias is white No is a facility in the Sality in the Sality is a facility in the Sality

Attachment 2b-4 Quebrada San Anton – CSA Report Sabana Llana Country Club Carpeta 11 – R 15c S001a – Calle Hernandez and Carlos De La Torres

INDICATOR	CHECK if	3.1	DESCRIPTION		RELATIVE SEVERITY INDID	((4:3)
Odor		Sewage	☐ Rancid/soor ☐ Petroleum/gat	□ I - Faint	2 Basily detected	D > Noticeable from a distance
Color	2	(□) Clear	☐ Brown ☐ Gray ☐ Yellow ☐ Orange ☐ Red ☐ ○Others	1 - Faint colom in sample boilde	2 - Clearly visible in sample bottle	3 - Clearly visible in outfall flow
Turbidity			Sec severity	1 - Slight clouding	Z Cloudy	3 - Opeque
Finalabien Dees Not Include Trashill			Toilet Paper, etc.) 🔲 Suds n (oil steen) 🗍 Other	☐ 1 — Fowfslight; original obvious	in 2 - Sorae; extications of origin (e.g., possible ruds of oil siecn)	[] 3 - Scate; origin clear (e.g., abvious out shees, sade, or floorin spritting materials)
tion 4: Physical Inc physical indicators	dicators for Bo that are not rel	oth Flowing a alec, to flow t	40.00 4 4 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		The second of	
INDICATOR	CHECKI	Pr sent	DESCRIPTION	- 2	COMMEN	(Q)
Outfall Damage]	Spalling Cradeing or Chapping	Puist		
Deposits/Stains	1	7	City Plow Line Paint Other			
Abnormal Vagotation			☐ Excessive ☐ Inhabited			
Pact pool quality		ם	Odos Ceiors Plostebles Oil Sods Excessive Aiges Oth			
Pipe benthio grawth	N 1		Brown Orange Green Oil	a:		
commendations:	AR PO	stamadiate actio	DESCARCAS SANITANIA A	V EL SISTEM	O PLUMBL DE	SER

Attachment 2b-4 - R15c S003a — Quebrada San Anton — Sabana Llana Country Club, Calle Carlos De La Torres near Calle Ledru

erian 1: Benkgrou			OCHD: 5	-003A	
	00/09		Body of Weter	DBPA SAN ANTO	W
Brigade Not. 4 Brid (Chadrocia): R	000	topen: 3			
			जिश्रे : htt	EPS DAKE:	
रेज्या	A TORRES	COUNTRY COUR	Sympa.	,5/11	
Land Usa in Dreisege Ar	ma (Check all that apply	d)			
□ Intented			□ Open 55 k=		
🔛 Witz-Urban Rasidan	eid		📑 देखारासंकाध		
T Syburben Ferdészés	1		Other		
☐ Cannedd			Kacwa Inferrito		
		uksehet [] []	R %	7	
SULTION 2: OLIVAL	a. Description			DIMERSTON (IN)	* PART NEW TOWN
ERACCIDOTHE ASSETS SHUTTON 2: OLTHAU LOCATION	i.Description MAYERIA		Rich Market	E(more:Directions	In Water
SILLY ON 2: OLIVAN	i.Description MAYERIA	OR British	D) a	1 100000	In Water
SULTION 2: OLITEAL	E. Description MATERIA MATERIA	OR British	Dashe	E(more:Directions	h Wast Mind Partially Prity
SELTION 2: OLTHAU LOCATION	Dave D	Digate Digate	可 Sngt:	E(more:Directions	In Water
SELTION 2: OLTHAU LOCATION	E Descauration MATERIA JACC Desc See See See	CAP Satismian ENY: Delyrical There (3 Other	Single Double Timple	Electricity Sy	la Waser Si No Partially Prity With Sectional Partially Partially
SELTION 2: OLTHAU LOCATION	A Description MATERIA ARCP	COS Security Corporation	Single Double Timple	Electric Directations Sy Depth.	la Waser Si No Partially Prity With Sectional Partially Partially
SELTION 2: OLTHAU LOCATION	A. Description MATERIA Sector Sector Sector Sector Connecto	CAP Brimle EDY: Diryhed Other Il freezuit Charles	Single Double Timple	Electricity	la Wiest No Partially Prily With Section 1 Partially Partially
SELTION 2: OLTHAU LOCATION	Description MATERIA MATERIA Shot Conserts Conserts Embern	COS SUmile HDR: Delyheal Green [] Crhen [] Instal 6 [] Instal 6 [] Instal 6 [] Other		Electric Directations Sy Depth.	la Wiest No Partially Prily With Section 1 Partially Partially
SELTION 2: OLTHAU LOCATION	A Description MATERIA ARCP	COS SUmile HDR: Delyheal Green [] Crhen [] Instal 6 [] Instal 6 [] Instal 6 [] Other	Single Double Timple	Electricity	la Wiest No Partially Prily With Section 1 Partially Partially
LOCATION LOCATION LOCATION GLOBert Plan [1] Open drainage	A Description MATERIA ARCP	COD British COD British COD British Cod Char Cod Char Cod Charles Cod Charles		Electricity	la Waser Si No Perindy Prity With Sediment Pathely Pathely





Attachment 2b-5 - R15c S003a — Quebrada San Anton — Sabana Llana Country Club, Calle Carlos De La Torres near Calle Ledru

Color Sulfide Other: 7 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 - Peant 1 -		cont III	DESCRIPTION	RI	ELATIVE SEVEETTMENDE	(412)
Color Green Gauge Red Other Sample bottle Sample				□ : - :- tant	2 - Essily detected	3 – Nociceable from a
Sewage (Toilet Paper, etc.) South 1 Provisitely origin 2 - Some; indications of Grigin (e.g., pressible auditor) Other. Other Ot		2				3 - Clearly visible by outfall flow
Sewage (Tailet Paper, etc.) Suck 1 - Pewistight, origin of lodgit (e.g., presslyk ands or oil sheen Treath			See revertly	☐ 1 – Slight clombors	2 - Cloudy	□ 3 – Орворис
Are physical indicators that are not related to flow present? Yes No INDICATOR CHECK!f.Pr DESCRIPTION Outfall Damage					of trigit (e.g., possult ands or oil	 1 - Sonac; origin clear (e.g., obsiom oil sheen, suds, or flustin smitnry materials)
Outfail Danuge			present? Yes No			and a description of
Outlait Danning Coursion	ror r	CHECKIT Promise	DESCRIPTION		COMMEN	
Abdurmal Vegetation	тире	0 🔲		; Puno:		
Poor pool quality	itains		Otly Flow Line Paint Otlice			
Post pool quality Sucs Suces Bacetsive Algan Other Pipe Senthing growth Scoommendations:	ತ್ರ ದಮಿಂತ		☐ Excessive ☐ Inhibited			
Recommendations:	(athly	m . D				
Recommendations:	growth	D.	☐ Brows: ☐ Onlinge ☐ Green ☐ Osli	ec.		
UERICICAR POSÍBLE DESCAPLOA SANIMARIO EN EL SISTEMA PLUVIA DE SER ASÍ SE DEBE REALIZAR TRABAJOS PARA SEPARAR	Lian			9410 EN E1	SISTEMA P	cvvjz c

Att. 2b-6 - Q15d-S004a, Quebrada San Anton, Sabana Llana Country Club – Calle Carlos de la Torres

esion 1: Backgroun	,		OWAOD S-	OGYA.	
ideate No. 4	07/09		Body of Warr	BOR SAN ANTO	N
2nd of Sundancial A	15 d Angion	3			
le in ci Acron A de	ANA Sector Con	WIRY COUR	00% Usik	OPSILMECE:	
Zinti :	PRVP.		25oto tr		
C. CARLOS D	E CA TORRES		611	8,5/19	
	ze (Check all that apply):				
□ Standy			Cym Space		
DE Urro-Urran Retulan	ed.		[] institutional		
CI Sabarban Ranidential			Over,		
Commental					
			Karwa Industries.	Mark Committee C	
(Bits opiniones cuin on	ler places del Maniarpio de Six	ia tent	K I joi	1	
	. F. SCS #700N				c. Surecto
			37/se	DIMENSIONS [[N]]	SUMMERGED
SECTION A CULTIVAL	. F. SCS #700N			Discos Dinautors:	in Water
SECTION AT UTITAL	MATÉRIAL		37/se		
SECTION A CULTIVAL	MATERIAL DOME	Zalbezko	M Sngle	Discos Dinautors:	in Webs
SECTION II OUTTAL LOCATION	MATERIAL DOP	Zichole Limpsel	Mee Meengle □ whie	Discos Dinautors:	in Weber If to Partielly Dicky
SECTION 1: OUTTAL LOCATION	MATERIAL DOWN	Zabedo Li appad Li Box Li Otter:	M Single Double Triple	Discos Dinautors:	in Water Z to Paralety Dady With Sectment 2 No O Partially
SECTION 2: OUTPAIL LOCATION Michael Hips	MATERIAL PARE PARE	Zuchrein Limpted Limpt	M Single Double Triple	Discover Directions:	in Water End Packeth Dody With Sectioners 2 No
SECTION 1: OUTTAL LOCATION	MATERIAL PARTIES PARTI	Zabedo Li appad Li Box Li Otter:	M Single Double Triple	Discover Dimensions:	in Water If the Partietly Dady With Sections: 2 No. O Partietly
SECTION 2: OUTPAIL LOCATION Circuit Has	MATERIAL TO MATERI	Z. Chada L. Laphel L. Laphel L. Sax L. Other: L. Sax L.	M Single Double Triple	Discrete Dimensions: 12 Depth: Top Witth:	in Water End Packeth Dody With Sectioners 2 No
SECTION 2: OUTPAIL LOCATION Michael Hips	MATERIAL MATERIAL PAGE COSP PAGE HERE See Cooper Cooper Excust Excust Excust Page Cooper Input Mew test Checks	Zachredo Limpozel Statedio Trapezel Trapezel Other: Other: Other:	M Smile Double Triple Other	Discrete Dimensions: 12 Depth: Top Witth:	in Water End Packeth Dody With Sectioners 2 No
SECTION 2: OUTPAIL LOCATION Circuit Has	MATERIAL TO MATERI	Zachredo Limpozel Statedio Trapezel Trapezel Other: Other: Other:	M Single Double Triple	Discrete Dimensions: 12 Depth: Top Witth:	in Water Z to Paralety Dady With Sectment 2 No O Partially



IMG 5119

Att. 2b-7 - Q15d-S004a, Quebrada San Anton, Sabana Llana Country Club – Calle Carlos de la Torres

INDICATOR	CHECK If Present		DESCRIPTION		RELATIVE SEVERITY INDIA	n(d:3)
Oder	Ω.	Sewage	☐ Rancidsour ☐ Petroleum/gas ☐ Other	🗆 I - Fuice	2 - Eusily detected	3 - Notecuble from a distance
Color	濕	☐ Carar ☑ Green	☐ Birmii ☐ Gray ☐ Yedina ☐ Grango ☐ Red ☐ Cilier:	1 = Faint colors in sample bottle	2 - Clearly visible in smaple bottle	3 - Clearly visible in outled flow
Turbidity			See severily	1 - Stight clouding	≃ss ☐ 2 – Claudy	[_] 3 - Opaque
Picarables -Does Not include Trankii			Tullet Paper, cir.,) 🔲 Suds n (vil sheen) 🔲 Ouze:	t = Feworlegat; ori	gan Z = Some; indications of origin (e.g., possible rads or oil sheen)	3 - Some; odgin dear (c.g., obvious oil thera, suds, or Boating sanitary materials)
re physical indicators	that are not rela	ited to flow	The second secon	100	COMMEN	TG.
INDICATOR	CHECKIR	Prospill	DESCRIPTION	- 4	Colligation	731
Contail Damage			Spailing, Cracking or Chipping Profit Convexion	g Paint		
Deposits/Stains			Oliy Plow Line Panet Other:			
Abnormal Vegetation		1	Uxcessive Inhibited			
Poor poul quality		1	Odors Colors Floatables OO Suits Examples Algie	l Sheen late:		
Pipe benthic growth		1	☐ Brown ☐ Orange ☐ Grace ☐ O	best		
ecommendations:	□ la	tonnodiate setio	n Long time action			-

Att. 2c-1 - MSJ MS4 Map — Quebrada San Anton — Consuelo Matos, Antonio Luciano



Att. 2c-2-R16d-S002a — Calle Garcilaso de la Vega and Antonio Luciano

ction 1: Backgroun	4			Outfall ID: 5-	002A	
08/007	/09			Body of Water:	BDA. SAN A	ANTON
Erigade Not. 4	. 7	Region:	2			
irid (Cuadricula): R/	4 d	tor El C	OMOUND AR	GPS Unit	GPS L	MK #:
Barrio: SABANA C	CANA	- 10	IEGA INT	Photo #s: 50	82,5083	
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
C. ANTONI Land Use in Drainage An						
	SE (CHECK EN CHE S	A. 2.7.		Open Space		
] Industri ė				☐ Institutional		
∑4 Uitre-Urben Resident	<u>:</u> 1			_		
🔲 Suburban Residential				Other:		
Commercial				Known Industries:	,	
Spate etanomis says ou	los planos del Munic	cipio de San i	Nuan? ⊠Si	□ No		
SECTION 2: OUTFAL	L DESCRIPTION				DIMENSIONS (MY SUBMERGED
SECTION 2: OUTFALL LOCATION	I. DESCRIPTION MATER	IAL		No N	DIMENSIONS (I	5 Water:
SECTION 2: OUTFAL	I. DESCRIPTION MATER RCP	IÁL CMP	☑ Circular	HAPE	e (1860)	in Water. No Partially
SECTION 2: OUTFAL LOCATION	I. DESCRIPTION MATER RCP PVC	IÁL CMP	☑ Circular	EAPE Desingle Double	Diameter/Dimensions:	In Water. No Partially Fully
SECTION 2: OUTFAL LOCATION	I. DESCRIPTION MATER ROP RCP PVC Steel	IAL CMP	Ctrouler Eliptical	BIANE Dasingle Double Triple	Diameter/Dimensions:	is Water. No No Partially Fully With Sediment
LOCATION 2: OUTFAL	I. DESCRIPTION MATER RCP PVC	IAL CMP	☑ Circular	EAPE Desingle Double	Diameter/Dimensions:	In Water. No Partially Fully With Sediment
SECTION 2: OUTFAL LOCATION	I. DESCRIPTION MÄTER RCP PVC Steel Other:	IAL CMP	Ctrouler Eliptical	BIANE Dasingle Double Triple	DiameterDimensions:	is Water No Partially Partially With Sediment No Partially
LOCATION 2: OUTFAL	L DESCRIPTION MATER RCP PVC Steel Other:	IAL CMP	Ctrouler Eliptical	BIANE Dasingle Double Triple	DiameterDimensions: 36	is Water No Partially Partially With Sediment No Partially
SECTION 2: OUTFAL LOCATION	DESCRIPTION MATER RCP PVC Steel Other: Concrete	IAL CMP	Circular Eliptical Box Other:	BIANE Dasingle Double Triple	DiameterDimensions:	is Water No Partially Partially With Sediment No Partially
LOCATION LOCATION LOCATION Closed Pipe	DESCRIPTION MÄTER ACP PVC Steel Other: Concrete Earthen rip-rap	IAL CMP	Circular Eliptical Box Other: Trapezoid	BIANE Dasingle Double Triple	DiameterDimensions: 36	In Water. No Partially Pully With Sediment No Partially Pully
LOCATION LOCATION Closed Pipe Open drainage	DESCRIPTION MATER RCP PVC Steel Other: Earthen rip-rap Other:	IAL CMP	Circular Eliptical Box Other: Trapezoid Parabolic Other:	Desingle Double Triple Other:	DiameterDimensions: 36 Depth: Top Width: Bottom Width:	In Water No Partially Pully With Sediment No Partially Pully
ECTION 2: OUTFALL LOCATION Closed Pipe Open drainage	L DESCRIPTION MATER RCP PVC Steel Other: Earthen rip-rap Other: (applicable wi	CMP HDPE	Circular Eliptical Box Other: Trapezoid Parabolic Other: seringles	BAPE Desingle Double Triple Other:	DiameterDimensions: 36 Depth: Top Width: Bottom Width:	In Water. No Partially Pully With Sediment No Partially Pully
LOCATION LOCATION Closed Pipe Open drainage	DESCRIPTION MATER ROP PVC Steel Other: Earthen rip-rap Other: (applicable will	IAL	Circular Eliptical Box Other: Trapezoid Parabolic Other: seringles	Desingle Double Triple Other:	DiameterDimensions: 36 Depth: Top Width: Bottom Width:	In Water No Partially Pully With Sediment No Partially Pully



IMC FOR?



MG_5083

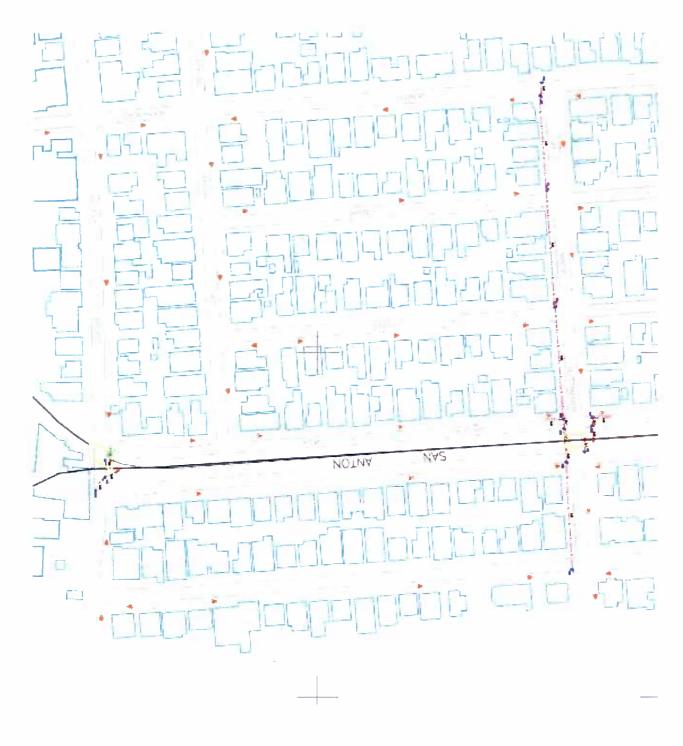
Att. 2c-3-R16d-S002a – Calle Garcilaso de la Vega and Antonio Luciano

INDICATOR	CHECK If- Present		DESCRIPTION	R	ELATIVE SEVERITY INDEX	1(0,72)
Odor		Scwage	☐ Rancid/sour ☐ Petroleum/gas ☐ Other:	1 – Faint	2 - Easily detected	3 - Noticeable from a distance
Color	8	Cicar	☐ Brown ☐ Gray ☐ Yellow ☐ Orange ☐ Red ☐ Other:	1 - Faint colors in sample bottle	2 - Clearly visible in sample bottle	3 - Clearly visible in outfall flow
'Turbidity			See severity	☐ 1 — Slight cloudiness	2 - Cloudy	☐ 3 — Opnque
Floatables -Does Not Include Trashii		1 - "	Toilet Paper, etc.) Suds in (oil sheen) Other:	☐ 1 — Few/slight; origin not obvious	2 Some; indications of origin (e.g., possible suds or oil slicen)	3 - Some; origin clear (c.g., obvious oil sheen, suds, or floatin sanitary materials)
are physical indicators	that are not rela	ated to flow p	and Non-Flowing Outfalls present? Yes No		COMMEN	15
INDICATOR	CHECKIT.	Present			0.000	
Outfall Damage		ì	11. 12	ling Paint		
			Corrosion			
Deposits/Stains	! 0		Oily Flow Line Paint Other			
Deposits/Stains Abnormal Vegetation	1			:		
			□ Oily □ Flow Line □ Paint □ Other □ Excessive □ inhibited □ Odors □ Colors □ Floatables	Oil Sheen Other:		
Abnormal Vegetation			Oily Flow Line Paint Other Excessive Inhibited Odors Colors Floatables Suds Excessive Algae	Oil Sheen		
Abnormal Vegetation Poor pool quality			Oily Flow Line Paint Other Excessive Inhibited Odors Colors Floatables Colors Suds Excessive Algae Brown Orange Green	Oil Sheen Other:		
Abnormal Vegetation Poor pool quality Pipe benthic growth Recommendations: Immediate Action Cleaning, uncover		crmediate action	Oily Flow Line Paint Other Excessive Inhibited Odors Colors Floatables Excessive Algae Brown Orange Green	Oil Shean Other:		a Octuaria

OU	TFALL RECONNAISSA	nce Inventor	y/Sample Coll	ECTION FIELD SHEET		Att. 2c-4 – Garcilaso de la Vega
ection 1: Background	d Data		Outfall ID: S-	005A		
	c1/09			BDA. SAN ANT	TON	and Consuelo Matos R16d-S005a
Brigade No: 4	e / Region:					
Grid (Quadricula): R1	10		GPS Unit	GP\$ LMK ₽:		
Berrio: SARAWA	CANA Sector EL C	OMANDAME	Photo#s:			The state of the s
C. GARCICAS CONSUELO	MATOS	INT.	5087,5	088		
Land Use in Drainage Art	es (Check all that apply):				3	
☐ Industrial			Open Space			
₩ Ultra-Ulban Resident	4a1		🔲 โกรซ์เบริวาณ		8	
•			Other:			
Suburban Residential						
Commercial			Known industries:			
Notes : ¿Esta estructura esta en	los planos del Municipio de San	Juan? 💢 Si	□ No	4		
SECTION 2: OUTFALL		EL. 121 - 4	and the second	DIMENSIONS (IN)	SUBMERG	IMG_5087
LOCATION	MATERIAL	12.4. 12.1. 1720	HAPE	Diameter/Dimensions:	In Water	
	12 CMS □ CMS	Circular Circular	Single	36	IX No □ Partie □ Pally	
	☐ PVC ☐ HDPE	☐ Eliptical	Double	30	D Fully	
Closed Pipe	☐ Steel	Вох	☐ Triple		With Sediment	
	Others	Other.	Other:		No Pertial	
	☐ Concrete	Trapezoid		Depth:		
	☐ Earthan	☐ Parabolic		Top Width:	3//////////////////////////////////////	
Open drainage	☐ rip-rap			Bortom Width:		
	Other:	Other:		201011	Manage .	
I La Samon	(applicable when collection	ng samiples)			7.57	
☐ In-Stream	Yes :		, Sklp to Section 4		Art =	The same of the sa
Flow Present?	2 151					IMG 5088
Flow Description (If present)	☑ Trickie ☐ Mode	rate Substantial				

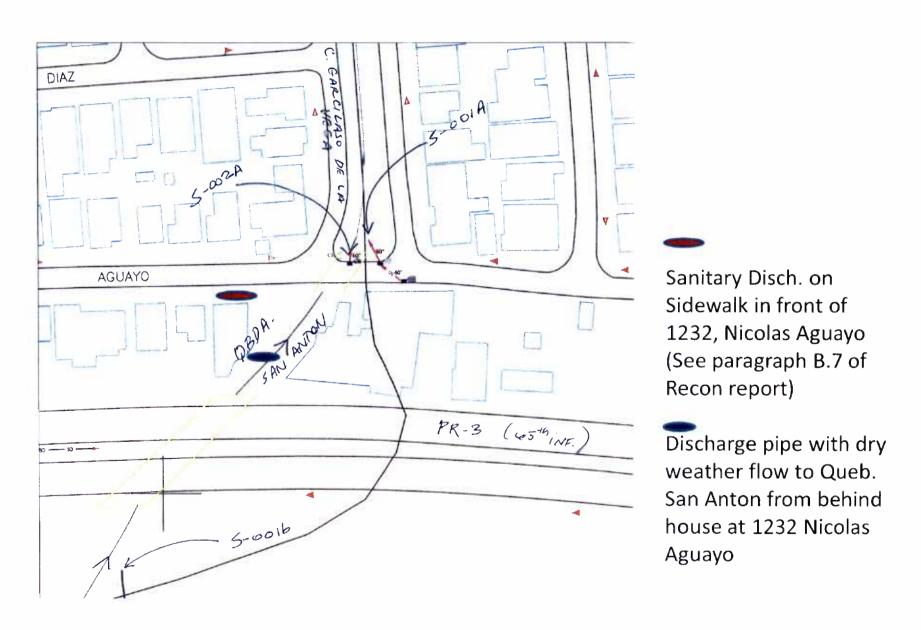
Att. 2c-4 – Garcilaso de la Vega and Consuelo Matos R16d-S005a

INDICATOR	CHECK IF		DESCRIPTION	RE	ELATIVE SEVERITY INDEX	((4:3)
Odor		Scwage	☐ Rancid/sour ☐ Petroleum/gas ☐ Other:	☐ 1 — Faint	2 - Easily detected	3 - Noticeable from a distance
Color	₽.	☐ Clear	☐ Brown ☐ Gray ☐ Yellow ☐ Orange ☐ Red ☐ Other:	1 - Faint colors in sample bottle	2 - Clearly visible in sample bottle	3 - Clearly visible in outfall flow
Turbidity			See severity	☐ 1 — Slight cloudiness	2 - Cloudy	3 - Opaque
FloatablesDoes Not Include Trash!!		Sewage (Foilet Paper, etc.) Suds	1 – Few/slight; origin not obvious	2 – Some; indications of origin (e.g., possible suds or oil sheen)	[] 3 - Some; origin clear (e.g., obvious oil sheen, suds, or floatii sanitary materials)
ction 4: Physical Ind e physical indicators	that are not rela	ted to flow p.				a state of the same state of t
INDICATOR	CHECK IF	Present	DESCRIPTON		COMMEN	19 1 1 1 1 1 1 1 1 1 1
Outfall Daniage			Spatting, Cracking or Chipping Per Corrosion	cling Paint		
Outfail Daniage Deposits/Stains						
			Corrosion			
Deposits/Stains			Corrosion Oily Flow Line Paint Othe Excessive Inhibited Odors Colors Floatables			
Deposits/Stains Abnormal Vegetation	0		Corrosion Oily Flow Line Paint Othe Excessive Inhibited Odors Colors Floatables Suds Excessive Algae	Oil Slicca		
Deposits/Stains Abnormal Vegetation Poor pool quality Pipe beathic growth commendations: Immediate Action		crmediate action	Corresion Coling Flow Line Paint Other Excessive Inhibited Colors Colors Floatables Suds Excessive Algae Brown Orange Green Long time action	Oil Sheen Other: Other:		
Deposits/Stains Abnormal Vegetation Poor pool quality Pipe beathic growth commendations: Immediate Action		crmediate action	Corrosion Colity Flow Line Paint Other Excessive Inhibited Colors Colors Floatables Suds Excessive Algae Brown Orange Green	Oil Sheen Other: Other:		Q. (Vu'a)

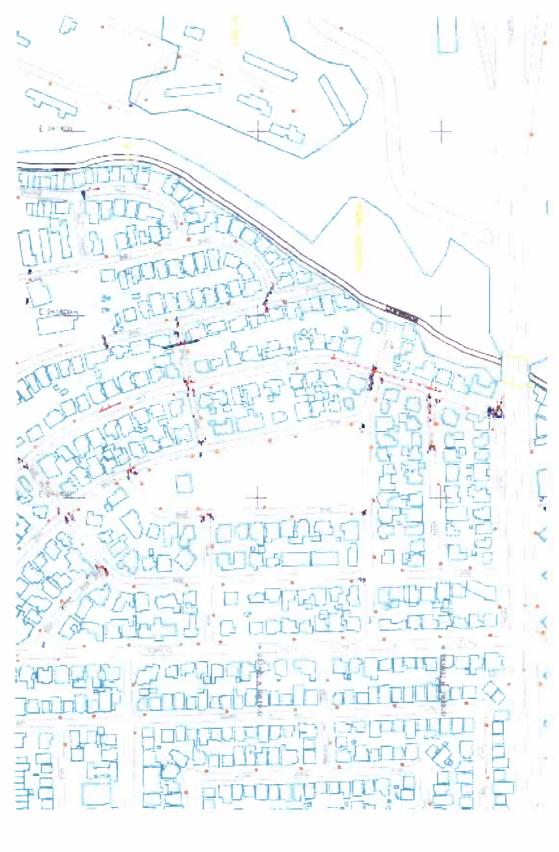


2d-1 MSJ MS4 Map Nicolas Aguayo

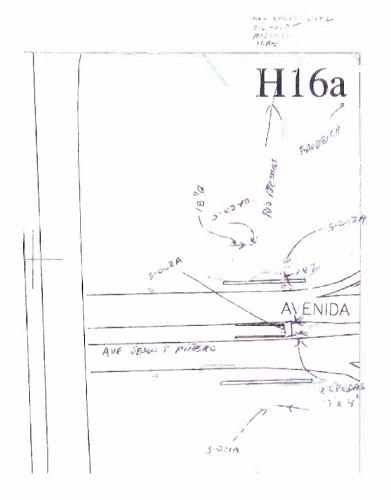
2d-2, - R18b — S001a — 2009 CSA Report Sabana Llana Comandante — Q. San Anton S001a — Nicolas Aguayo — Note S-001A is not in San Juan, but within Carolina

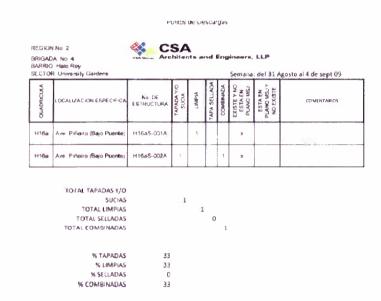


Attachment 3 - MSJ MS4 Map Calle Ariel, Lira, Lince/ Quebrada Juan Mendez



Att. 4a-1 H16a-002a – Jesus T. Pinero (PR-17) and Rio Piedras River (Under Bridge)





The Data Sheet was not available for outfalls 001a and 002a.

Att. 4a-2 H16a-002a – Jesus T. Pinero (PR-17) and Rio Piedras River (Under Bridge)



See Photos 6113 and 6114

PR-23 — Puerto Nuevo Norte - Carpeta 11 Attachment 5a-1 - Puerto Nuevo River and Franklin Delano Roosevelt Ave.



Attachment 5a-2 - Puerto Nuevo River and Franklin Delano Roosevelt Ave. (PR-23) G14a-S-004A— Puerto Nuevo Norte - Carpeta 11

OUTFALL RECONNAISSANCE INVENTORY/ SAMPLE COLLECTION FIELD SHEET

Section 1: Background Data

Flow Description

(If present)

☑ Trickle ☐ Moderate ☐ Substantial

/	,		Outfall ID: 5-	-coyA			1
Brigade No: 4	c7/09		Body of Water: C	AVAL PUERTO NUE	V0	7000	1
hid (Cuadricula):	- 14a Reg	on: 2					
arrio: P. 16070 A	NEVO Sector P	USRTO NUEVO	GPS Unit:	GPS LMK #:			
treet :		NORTE	Photo #s: 659	18, 4601, 6602,	6693		
BATO DIFLOTE	AVE ROOSELVE	r 101		, , , ,		and the second	
	rea (Check all that apply):						-
Industrial			Open Space				
3. Ultra-Urban Resider	กษ์สไ		☐ Institutional			300	
🗒 Suburban Residentia	El .		Other:			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Commercial			Known Industries:		· · · · · · · · · · · · · · · · · · ·	2	
Notes :							25136
					1	CIMG659	8
	nles planes del Municipio de S	an Juan? 🔲 Si	₩ No				
¿Esta estructura esta er	les pienes dei Municipio de s	STABLE CT 21	100				1
SECTION 2: OUTFAL	t Droop arios						. 1
LOCATION	MATERIAL	' s	HAPE	DIMENSIONS (IN.)	SUBMERGED		
20077.201	⊠RC? □CMP	Circular	Single	Diameter/Dimensions:	In Water.		7
	□ PVC □ HDP		☐ Double	54	₩ No □ Partially	S. S	
					1 2 3 3 5 1 7		July
A C1 1 111	Const.	□ Boy	□ Triple		Folly		July
Closed Pipe	☐ Steel	☐ Box	☐ Triple		Fully With Sediment:		Ju
Closed Pipe	Steel	Box Other:	☐ Triple		Folly		14
Closed Pipe		Other:	_ '	Death:	Fully With Sediment:		14
	Other	Other:	_ '	Depth:	Fully With Sediment:		Jun
	Other	☐ Other:	_ '	Top Width:	Fully With Sediment:		
	Concrete	Other:	_ '		Fully With Sediment:		
☑ Closed Pipe ☐ Open drainage ☐ In-Stream	Concrete Estates property	☐ Other:	_ '	Top Width:	Fully With Sediment:	CIMG660	1

Outfall Reconnaissance Inventory Field Sheet

Section 3: Physical Indicators for Plowing Outfalls Only

INDICATOR	CHECK if Present		DES	CRIPTION	*	RELATIVE SEVERITY INDEX (1-3)					
Céar	Z	Schalte	Amidian] Perokuaya		1-Fixt	2 - Escay detected	5 - Noticeable from a			
Color	R	Carr		Ca) Yelo		1-Faint colors in sample bottle	2-Charly visible in sample bottle	3-Cearly visible in outfall flow			
Tenido			So	z svcity		: - Slight cloudiness	2-Clearly	[] 3 - Obstant			
Postables -Doss Not Include Track!!	٥	Senage (T	oild Paper, etc.) [(cil shotz) [□ Suds □ Ociac] - Fewislight; origin not obvious	2-Sonut, indications of origin (e.g., possible suds or oil shown)	S-Source, origin clear (e.g., obvious oil sheen, such, or Benti sambary mailtimbs)			
ection 4: Physical Int rephysical indicators	licators for Bo that are not rel	oth Flowing a aled to flow pr	nd Non-Mowing useni? Yo	g Outfalk cs 📝 No	07						
INDICATOR	CHECK if	Present	- 1	DESCRIPTE	COHMEN	15					
0±210±20			من پخالنج کام محمد	ching of Chippers] hunghia						
Departs Same			Oby Dikw	ilin []Pin	Other:						
Ahopmal Vegetation			Bassim []	at pixel							
Poor pool quality				Colors Floated Escentre Algor							
Ape bentile growth	5		Dawi]	Onange Green	Càx:						
ccommendations: Innaciate Action Course acord	PEDE 1	NVESTI CA SE DEL	gh positi	agunina BLES DESSA 17AR PROJA	RSAS SH ECTO PAI	YNITHILAS I	g este siste. Sistemas	MA PLUVIÁL			

Attachment 5a-2 - Puerto Nuevo River and Franklin Delano Roosevelt Ave. (PR-23) G14a-S-004A— Puerto Nuevo Norte - Carpeta 11

Attachment 6a-1 - F17d S-001A, Caparra Heights, Reparto Metropolitano, Behind 1150/1166 Ave. Americo Miranda- MSJ – MS4 Map





Approximate discharge location behind Kayak Shop

Attachment 6a-2 - F17d S-001A, Caparra Hieghts, Reparto Metropolitano, Behind 1150/1166 Ave. Americo Miranda

Date:	1 1			Outfall ID! 5	001A						
	SEPT/C	9		Body of Water: WEBRADA PONA ANA							
Brigade No: 4							,,,,				
Grid (Cuadricula):	17 d	Region	1: 4								
Grid (Cuadricula): F Barrio (ATA RRA Street	HEIGHTS	Sector: PE	PARTO	GPS Unit: GPS LMK #:							
Street		MET	ROPOUM110	Photo #s: 5674, 5675, 5676, 5677							
CAUE AU	MERICO N	LIBANA	OA								
Land Use in Drainage A											
lndustrial				Open Space							
Ultra-Urban Residen	ntial			☐ Institutional							
Suburban Residentia	ıl			Other:							
Commercial Commercial				Known Industries:							
Notes :											
			Juan? ∐ Si	≥ No							
SECTION 2: OUTFAL	L DESCRIPTION	1									
SECTION 2: OUTFAL LOCATION	L DESCRIPTION			HAPE	DIMENSIO	NS (IN.)	SUBMERGED				
	_				Diameter/Dimens	sions:	In Water:				
	MATE	RIAL	S	HAPE	Diameter/Dimens		In Water: No Partially				
	MATE RCP	CMP	S Circular	HAPE	Diameter/Dimens	sions:	In Water: No Partially Fully				
LOCATION	RCP PVC	CMP HDPE	S Circular	HAPE Description Double	Diameter/Dimens	sions:	In Water: Ar No Partially Fully With Sediment: Ar No Partially				
LOCATION	MATE ☑ RCP ☐ PVC ☐ Steel	CMP HDPE	Circular Eliptical	HAPE De Single Double Triple	Diameter/Dimens	sions:	In Water: No Partially Fully With Sediment:				
LOCATION	MATE ☑ RCP ☐ PVC ☐ Steel	CMP HDPE	Circular Eliptical Box Other:	HAPE De Single Double Triple	Diameter/Dimens	sions:	In Water: Ar No Partially Fully With Sediment: Ar No Partially				
LOCATION CX (Closed Pipe	MATE RCP PVC Steel Other:	CMP HDPE	Circular Eliptical Box Other:	HAPE De Single Double Triple	Diameter/Dimens	sions:	In Water: Ar No Partially Fully With Sediment: Ar No Partially				
LOCATION	MATE RCP PVC Steel Other: Concrete	CMP HDPE	Circular Eliptical Box Other:	HAPE De Single Double Triple	Diameter/Dimens	sions:	In Water: Ar No Partially Fully With Sediment: Ar No Partially				
LOCATION **Closed Pipe**	MATE ☐ RCP ☐ PVC ☐ Steel ☐ Other: ☐ Concrete ☐ Earthen	RIAL CMP HDPE	Circular Eliptical Box Other:	HAPE De Single Double Triple	Diameter/Dimens	sions:	In Water: Ar No Partially Fully With Sediment: Ar No Partially				
LOCATION CX (Closed Pipe	MATE RCP PVC Steel Other: Concrete Earthen rip-rap	RIAL CMP HDPE	Circular Eliptical Box Other: Trapezoid Parabolic Other:	HAPE De Single Double Triple	Diameter/Dimens	sions:	In Water: Ar No Partially Fully With Sediment: Ar No Partially				

Attachment 6a-3- F17d S-001A, Caparra Hieghts, Reparto Metropolitano, Behind 1150/1166 ve. Americo Miranda

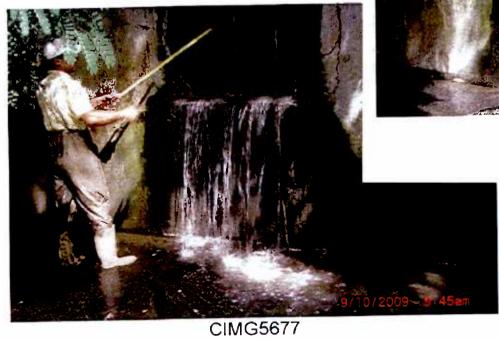
Outfall Reconnaissance Inventory Field Sheet

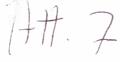
INDICATOR	CHECK if Present		DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)						
Odor 🔀 🔀 Sewage			Rancid/sour Petroleum/gas	1 - Faint		2 - Easily detected	3 - Noticeable from a distance			
Color	×	☐ Clear☐ Green	☐ Brown ☐ Gray ☐ Yellow ☐ Orange ☐ Red ☐ Other:	1 - Faint color		2 - Clearly visible in sample bottle	3 - Clearly visible in outfall flow			
Turbidity	X	V.	See severity X	☐ 1 — Slight clos	udiness	2 - Cloudy	3 - Opaque			
Fioatables -Does Not Include Trash!!			(Toilet Paper, etc.) Suds m (oil sheen) Other:	1 - Few/slight	t; origin	2 – Some; indications of origin (e.g., possible suds or oil sheen)	3 - Some; origin clear (e.g., obvious oil sheen, suds, or floatin sanitary materials)			
ection 4: Physical Inc re physical indicators	dicators for Bo that are not rela	th Flowing ated to flow	and Non-Flowing Outfalls present?		,					
INDICATOR	CHECK if	Present	DESCRIPTION			COMMEN	COMMENTS			
Outfall Damage	Ģ	(Spalling, Cracking or Chipping Peelin Corrosion	g Paint						
Deposits/Stains]	Oily Flow Line Paint Other:							
Abnormal Vegetation]	☐ Excessive ☐ Inhibited							
Poor pool quality]	Odors Colors Floatables Oi Suds Excessive Algae Ot							
Pipe benthic growth]	Brown Orange Green On	her.						
ecommendations: Immediate Action Cleaning, uncover	TIN LES	termediale action	on & Long time action SERCAS SANITARIA DE SE REDUIFRE REJARACIONE	r así re	avi <u>e</u> k	E TRAGAJOS	PARA			

Attachment 6a-4- F17d S-001A, Caparra Heights, Reparto Metropolitano, Behind 1150/1166 Ave. Americo Miranda

CIMG5675

CIMG5676





Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS52 TJSJ 012039 CF6JSJ PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: SAN JUAN/P.R.

MONTH: APRIL
YEAR: 2012
LATITUDE: 18 25 N
LONGITUDE: 66 0 W

		ERAT					: PCPN:		SNOW:	MIN				SHINE		Y ======	: PK V	WND
1	2	3	4	5	6A	6B	7	 8	9	10	11	12	13	14	15	16	17	18
-	-		-1	9	OA	OD	,	0	12Z			2MIN	10	1.1	± 0	7.0	1/	10
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	S-S	WX	SPD	DR
===	====	====	====	====	====:	====	=====	====:										
1	89	72	81	1	0	16	0.00	0.0	0	4.6	13	190	M	M	2		21	160
2	90	74	82	2	0	17	0.00	0.0	0	4.5	13	140	M	M	3	8	20	140
3	86	76	81	1	0	16	0.00	0.0	0	4.4	12	10	M	M	5		17	10
4	85	75	80	0	0	15	0.00	0.0	0	7.9	17	70	M	M	5	8	21	50
5	88	76	82	2	0	17	T	0.0	0	8.7	18	60	M	M	5		28	90
6	90	75	83	3	0	18	0.00	0.0	0	5.2	18	70	M	M	4		24	110
7	85	75	80	0	0	15	0.15	0.0	0	4.7	17	70	M	M	4		20	70
8	85	75	80	0	0	15	T	0.0	0	5.9	15	60	M	M	4		20	20
9	82	74	78	-2	0	13	0.34	0.0	0	3.5	22	60	M	M	6	138	25	50
10	85	73	79	-1	0	14	1.70	0.0	0	4.3	22	90	M	M	6	1238	26	100
11	89	73	81	1	0	16	0.00	0.0	0	4.6	20	80	M	M	3		23	80
12	92	75	84	4	0	19	0.34	0.0	0	2.5	16	240	M	M	4		22	240
13	87	74	81	1	0	16	0.57	0.0	0	3.6	14	10	M	M	5	18	21	360
14	81	74	78	- 2	0	13	0.68	0.0	0	9.3	23	30	M	M	7	18	31	30
15	82	74	78	-2	0	13	0.02	0.0	0	15.8	22	20	M	M	7		30	20
16	83	75	79	- 1	0	14	T	0.0	0	14.5	22	70	M	M	5		30	60
17	83	73	78	-2	0	13	T	0.0	0	13.4	21	50	M	M	4		26	70
18	82	72	77	- 3	0	12	0.00	0.0	0	6.9	14	10	M	M	3		21	10
19	82	71	77	- 3	0	12	0.00	0.0	0	5.9	16	60	M	M	3		21	40
20	84	72	78	- 2	0	13	0.00	0.0	0	8.0		60	M	M	4		25	60
21	86	75	81	0	0	16	T	0.0	0	8.6	24	60	M	M	4		31	70
22	89	76	83	2	0	18	0.69	0.0	0	4.5	14	140	M	M	4	1	20	150
23	91	78	85	4	0	20	T	0.0	0	6.6	15	150	M	M	4		22	140
24	92	79	86	5	0	21	0.00	0.0	0	6.6	17	140	M	M	3		23	140
25	87	78	83	2	0	18	0.35	0.0	0	7.2	18	80	M	M	5	8	23	90
26	88	77	83	2	0	18	T	0.0	0	11.9	23	80	M	M	4		26	60
27	88	76	82	1	0	17	0.08	0.0	0	10.0	22	60	M	M	5		25	70
28	87	76	82	1	0	17	0.01	0.0	0	11.8	23	70	M	M	4		31	40
29	87	75	81	0	0	16	0.09	0.0	0	9.5	25	90	M	M	4		29	90
30	85	75	80	- 1	0	15	0.28	0.0	0	7.6	20	110	M	M	5	1	24	100

```
______
_____
                                  7.4 FASTST M M 4 MAX (MPH)
AV 86.3 74.8
                         MISC ----> # 25 90 # 31 30
NOTES:
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                  STATION: SAN JUAN/P.R.
                                  MONTH: APRIL
                                         2012
                                  YEAR:
                                  LATITUDE: 18 25 N
                                  LONGITUDE: 66 0 W
[TEMPERATURE DATA]
                  [PRECIPITATION DATA]
                                        SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 80.6 TOTAL FOR MONTH: 5.30 1 = FOG OR MIST
DPTR FM NORMAL: 0.2 DPTR FM NORMAL: 0.62 2 = FOG REDUCING VISIBILITY
HIGHEST: 92 ON 24,12 GRTST 24HR 1.79 ON 9-10 TO 1/4 MILE OR LESS
LOWEST:
         71 ON 19
                                         3 = THUNDER
                   SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS
                   TOTAL MONTH: 0.0 INCH 5 = HAIL
                              0.0
                   GRTST 24HR
                                        6 = FREEZING RAIN OR DRIZZLE
                   GRTST DEPTH: 0
                                         7 = DUSTSTORM OR SANDSTORM:
                                            VSBY 1/2 MILE OR LESS
                                         8 = SMOKE OR HAZE
[NO. OF DAYS WITH]
                  [WEATHER - DAYS WITH]
                                        9 = BLOWING SNOW
                                         X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 13
MAX 90 OR ABOVE: 5 0.10 INCH OR MORE:
MIN 32 OR BELOW: 0 0.50 INCH OR MORE:
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 1
[HDD (BASE 65) ]
TOTAL THIS MO. 0 CLEAR (SCALE 0-3) 3
DPTR FM NORMAL 0 PTCLDY (SCALE 4-7) 27
TOTAL FM JUL 1 0 CLOUDY (SCALE 8-10) 0
DPTR FM NORMAL
              0
[CDD (BASE 65) ]
TOTAL THIS MO. 473
DPTR FM NORMAL 14
                 [PRESSURE DATA]
TOTAL FM JAN 1 1664 HIGHEST SLP 30.11 ON 15
DPTR FM NORMAL 23 LOWEST SLP 29.85 ON 2
[REMARKS]
#FINAL-04-12#
```